

Section

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Author's Edition











WORLD'S • FAIR • COLLECTION



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among these groups are illustrated the results of patent processes for the enamelling of iron goods with such perfect finish as to resemble porcelains and china-ware. Among them are flower-stands, ink-stands, vases, shields, console and card-tables, and numerous articles for table use.

In textiles Germany is well represented, with individual exhibits so combined that a single group may contain the choicest products of a score of factories. In one of the windows, for instance, a number of firms unite in



EXTERIOR VIEW AUSTRIAN SECTION

displaying all the processes of silk manufacture, from the cocoon to the completed fabric. Side by side with dress goods and trimmings are silks prepared for upholstery use, for neckwear, umbrellas, and parasols, all these from the mills of a single town. Another town makes a specialty of laces and embroideries, and a third has an assortment of knit goods in woolen, silk, and cotton. Still another excels in lace curtains, which are displayed on the surrounding walls in most elaborate designs. From a state institution at Schneeberg comes an assortment of hand-made laces; from Reichenau a choice display of woolens, and from Glauchau of the women's dress goods produced by the mills of Saxony.

Adjacent to the German section is the Austrian pavilion, and passing between its massive pillars and beneath an arch surmounted



IRON EXHIBIT

by the national Eagles, attention is first attracted by the life-size portrait of Emperor Francis Joseph, woven in cotton and silk by the power loom. This is said to be the first work of the kind executed by machinery, and comes from a Vienna factory. A photograph was first enlarged on a scale of more than fifty to one, the image being reflected on a linen sheet. The outlines made from this served as the foundation for the likeness, which was reproduced on one hundred sheets, composed of nearly 20,000 cards, and the cotton and silken threads of the design drawn through millions of holes



INTERIOR VIEW AUSTRIAN SECTION





AUSTRIAN SECTION



SPANISH FLOWER MERCHANT



BULGARIAN GIRL



SPANISH FLOWER MERCHANT



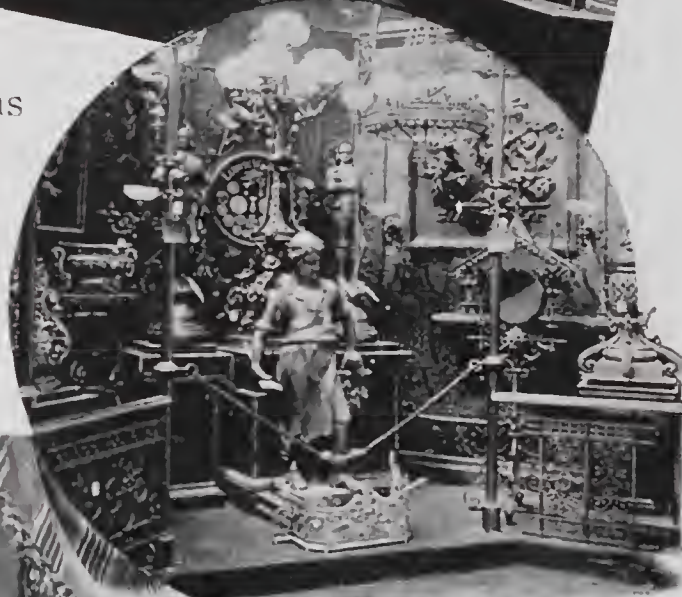
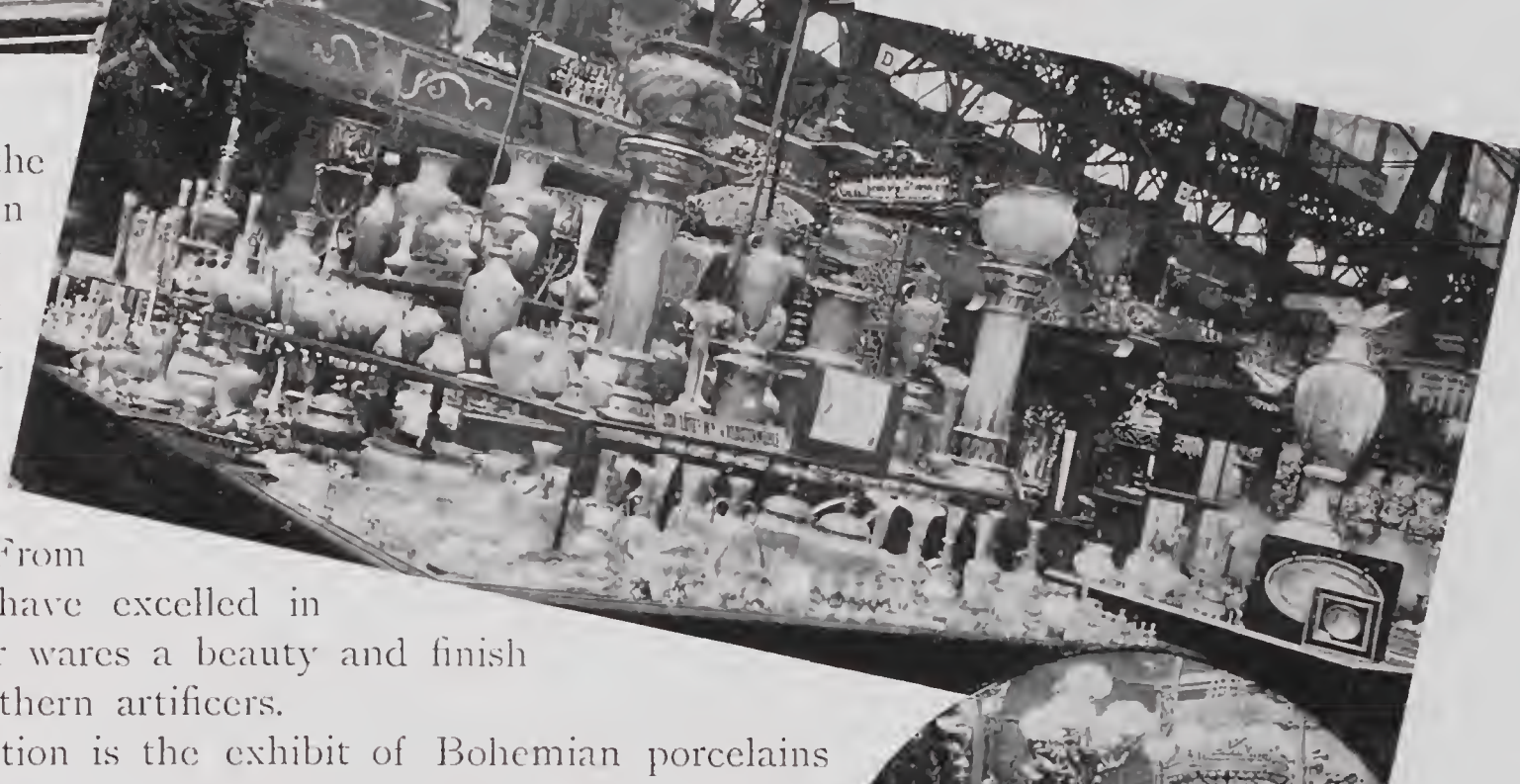


BOHEMIAN GLASS

As in the German section and the German village on the plaisance, so in the Austrian pavilion, one of the most attractive exhibits is that of art metal work, especially of vases, plaques, ancient armor, and imitations of ancient handiwork. A fine display of bronzes is made by Camerden and Forster, agents in New York for the manufacturers. From time immemorial the Germanic races have excelled in this line of manufacture, giving to their wares a beauty and finish which is not found among those of southern artificers.

But the gem of the Austrian section is the exhibit of Bohemian porcelains and glassware. It was at first intended to establish temporary works in the Midway plaisance, where would be shown all the processes of manufacture; but for some reason this project was abandoned, and we see only the results. No mere factory, however, could explain how for many ages this industry has descended from father to son, each generation patiently striving to improve on the workmanship of its predecessor. The display is therefore the illustrative and collective result of centuries of individual endeavor. All the famous factories of Bohemia have contributed to the exhibit of glassware, which is placed, as it should be, in the

punctured on the surface. An entire year was required for this task, and no wonder that the delicate lines and shadings of the finished portrait aroused the admiration of the emperor, to whom it was presented. With his permission it was placed on exhibition in the Austrian section as one of the triumphs of textile manufacture.



AUSTRIAN BRONZE

foreground. As a centrepiece is the tall vase, fashioned in imitation of onyx, and loaned for the occasion by Emperor Joseph. Side by side are huge punch-bowls and tiny glasses, ornamented with arabesque designs, and softly tinted with the hues of wax or pearl. There are entire services of porcelain ware, adorned with flowers and wreaths in gold and light blue; there are beautiful statues of clay so manufactured as to resemble ivory, and as a contrast



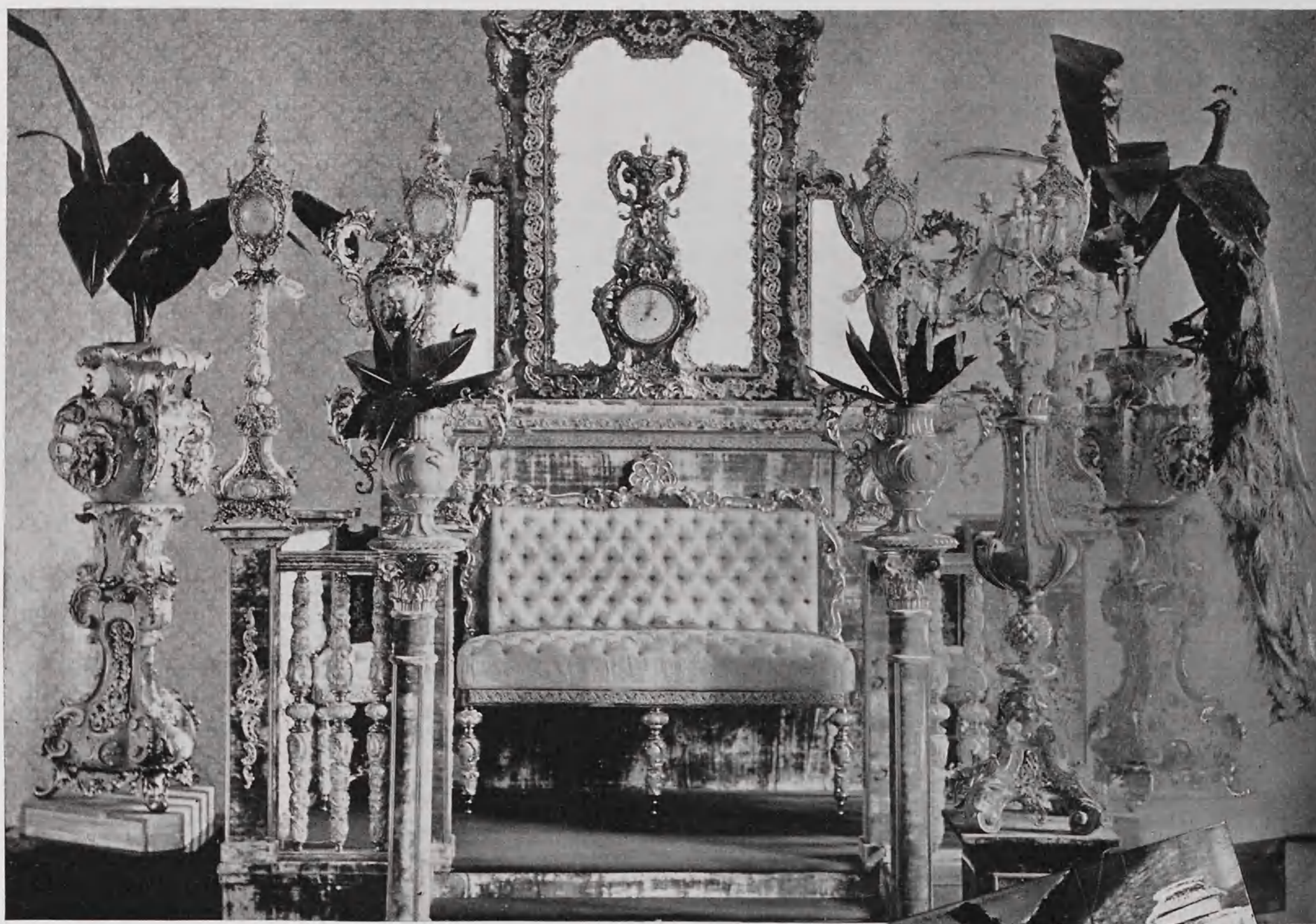
AUSTRIAN BRONZE





LION FOUNTAIN AND OBELISK, GRAND BASIN





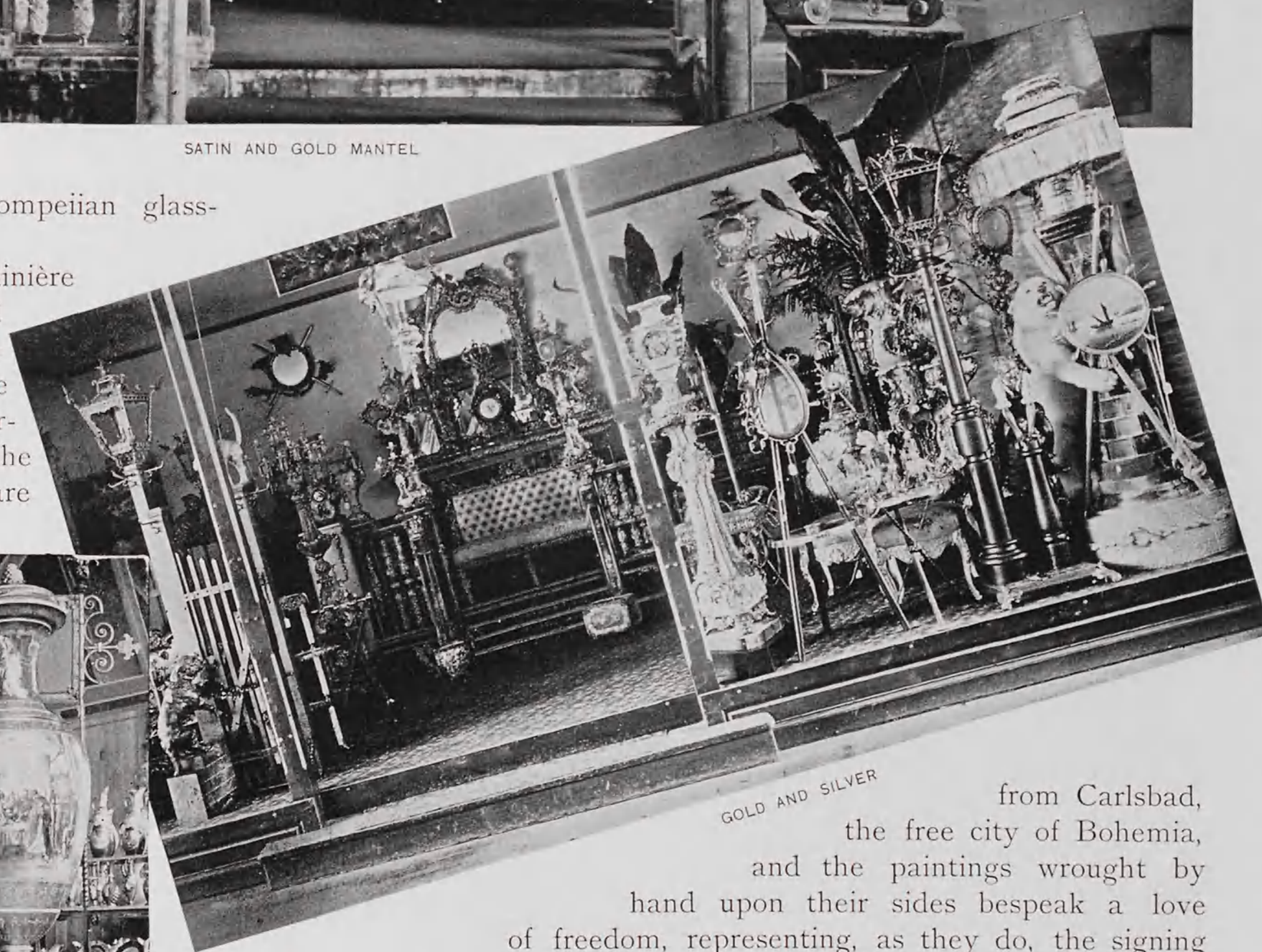
SATIN AND GOLD MANTEL

rose-colored pieces of Pompeian glass-ware.

Around a huge jardinière is a group of decorated porcelain, in royal blue and gold, and near by are two revolving urns, towering above the head of the tallest visitor. The last are



ALTROHLAU VASES



GOLD AND SILVER

from Carlsbad, the free city of Bohemia, and the paintings wrought by hand upon their sides bespeak a love of freedom, representing, as they do, the signing of the magna charta and the declaration of independence, the taking of the Bastille, and the abolition of slavery. Vienna contributes the most varied assortment of fancy articles, together with a large collection of jewelry and gold and silver ware, while the entire monarchy may be said to have an interest in the model room, under the gallery, royally furnished and decorated. By mural paintings and shrubby plants the background is made to represent a conservatory opening from a beautifully frescoed chamber. The gilded,





BELGIAN SECTION



heavy furniture is upholstered in rich Gobelin tapestry, and includes a grand piano in ivory and gold, and a huge Moorish clock with fret-work of cunning design.

In the line of leather goods are tables, chairs, and other furniture made of pressed leather, wall decorations and specimens of book-binding, ancient and modern. A treasure guarded with jealous care is a bible bound in silver, its covers inlaid with gold and on the front a vine traced in

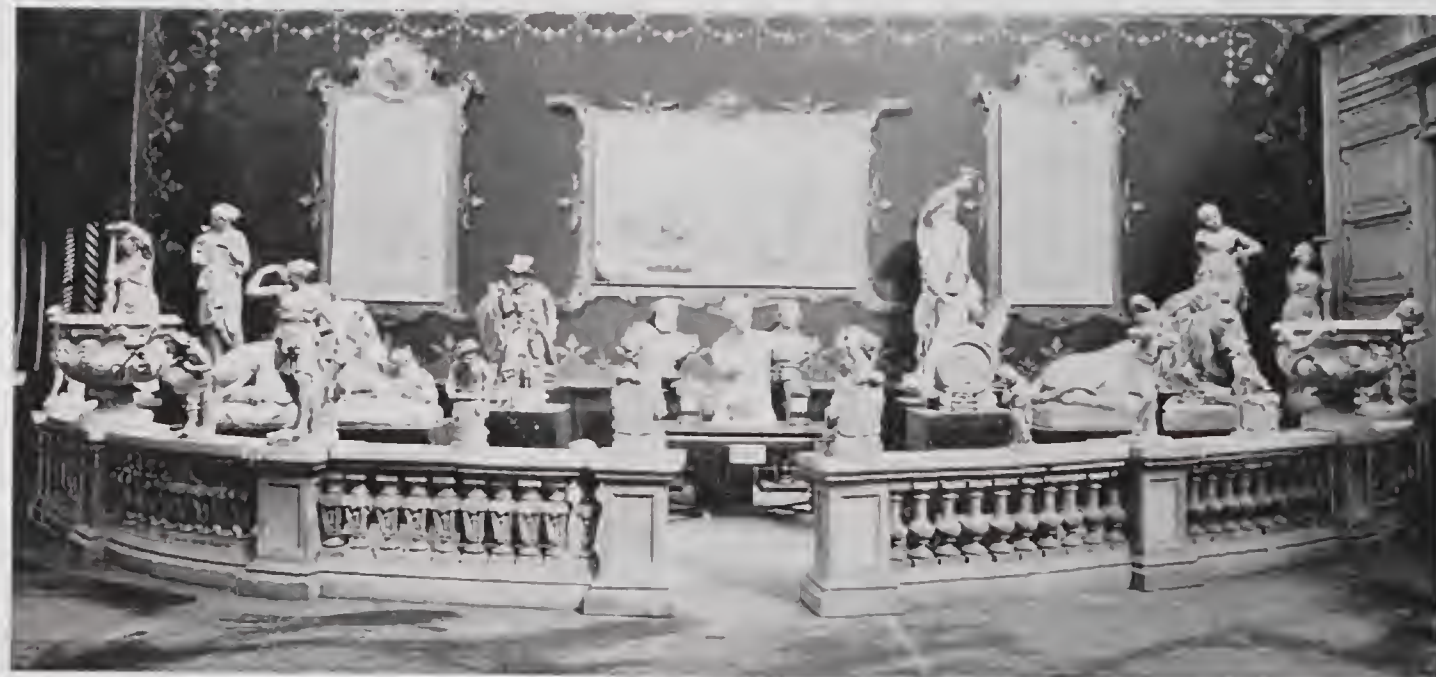
To the was accorded a the French pan- nition of the close commercial rela- countries. Here est approach to a display contained Manufactures, for prise was organ- of commerce as Brussels, Ant- Liège, and other centres of commercial and industrial activity. From each of these bodies members were selected by the king, forming together the Superior Council of Industry, whose special duty it was to see to the choice and preparation of the various collections. The result is a well considered, well proportioned, and skilfully arranged exhibit.

The pavilion, which is of itself a product of native skill and taste, was fashioned by Belgian workmen before being shipped in sections to Chicago. It is of the same height as the French structure, and its lofty central portal, draped with rich garnet portières, forms a sightly entrance way. Within is a bronze statue of Leonidas at Thermopylae, by Gaef, one of the foremost sculptors of Bruges, more than seven feet high and cast in a single piece, on its left a bronze urn, and on its right a dainty statuette representing Innocence Tormented by Love.

First among the exhibits are the finest of Belgian laces, including Valenciennes, Venetian point, Venetian guipure, duchesse, and Mechlin. Near them are the daintiest of shawls and bridal veils, one of the latter made of round point lace, fifteen feet long and a dozen in width, being valued at \$7,000, while for a lace shawl with very few feet of its precious surface twice that sum is demanded. Other textiles of more substantial character, as linens, cottons, and dress goods, though forming an excellent display, attract but little attention as compared with their costly environment.

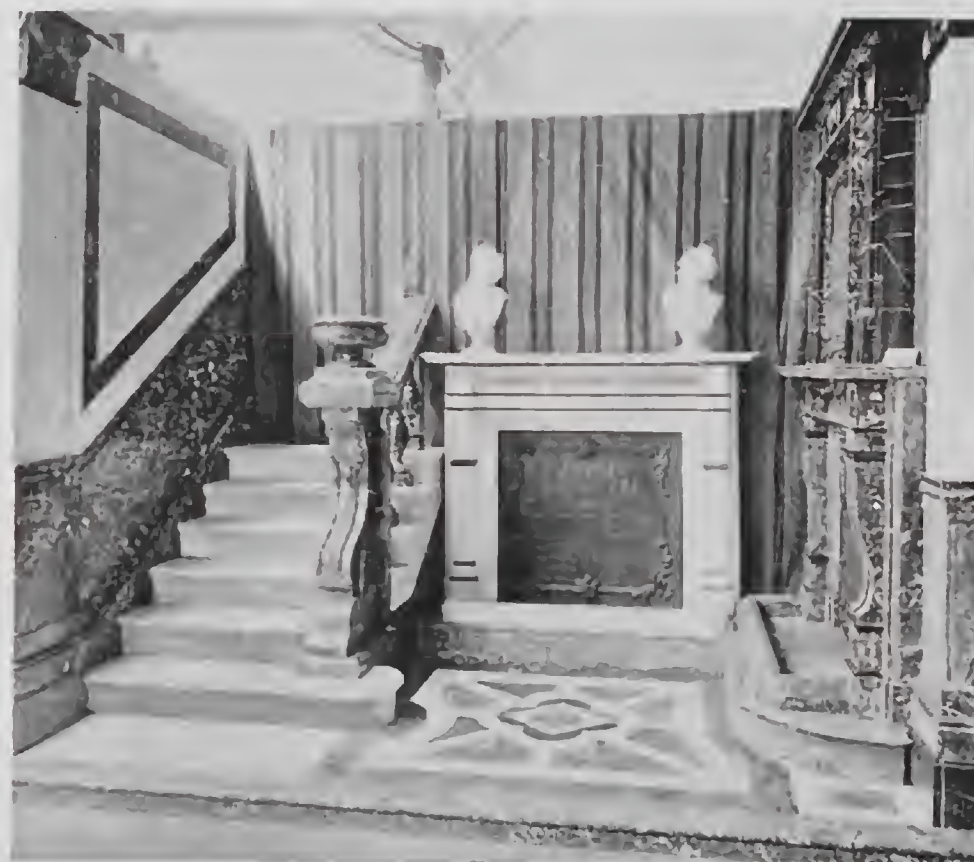
Ceramic wares, in the form of vases, porcelain sets, and glass-ware, cut, etched, engraved, and stained, fill other portions of the pavilion. Deserving of special mention is the fine display of porcelains, table-ware, tiles, and mural decorations by a La Louvière firm. The exhibits of marbles is also worthy of note, including, among other pieces, a handsome staircase and fireplace, into which are worked eight different native varieties.

Liège has long been recognized as one of the great centres for the manufacture of small arms, both for military and sportsmen's use, its collection forming a prominent feature in the Belgian section. One of the largest establishments has a collection not only of guns, but of unfinished weldings, with a view to illustrate the methods of manufacturing



BELGIAN SECTION

Belgian section site adjacent to vilion, in recog- geographic and tions of the two we have the near- purely national in the hall of the entire enter- ized by chambers among such cities werp, Ghent,



MARBLE EXHIBIT, BELGIUM







RUSSIAN SECTION



NORWAY SECTION



Damascus and twist barrels. But to enumerate all the branches of manufacture represented in the 45,000 square feet allotted to the Belgian department would be an endless task. Prominent among them are the draperies, decorative panels, and paintings, and other applications of art to household use. A suggestive feature also is the exhibit of soft felt hats and sombreros, of which many millions are imported by the United States and Latin America.

The vast empire of all the Russias, occupying nearly one-fifth of the land surface of the earth, is represented in the hall of Manufactures by some 40,000 square feet of exhibiting space, or about one square inch to every two square miles of her territory. The exhibits are arranged as they should be, with a view to illustrate all the phases of national life, representing not only the luxury and civilization, but the suffering and semi-savagery of the empire. Thus it is with a realizing sense of the vastness of her dominion that we enter, for instance, the Asiatic room, and here compare the fabrics of Persia and those which are subject to the empire and those which she is striving to render subject, contribute to what is known as the Central Asiatic exhibition, which was also displayed at a former exposition held in the city of Moscow.



EXTERIOR RUSSIAN PAVILION

The pavilion is of the ecclesiastic style of Russian seventeenth century architecture, with the principal entrance at the corner, in the form of a lofty arch surmounted by a tower, and with a smaller door-way in the centre of its façade, fronting on Columbia avenue. Near the main portal are two vases of red jasper, forwarded by the royal museum, and which it would be extremely difficult to duplicate, while the copies, in lapis-lazuli and malachite, of others in the royal palace at St Petersburg cannot be readily detected from the originals. Other vases and urns of most intricate workmanship are contained in this collection, with statuary and mantelpieces, fashioned of porphyry, obsidian, jasper, malachite, and various ornamental stones, aglow with nature's richest hues.

In the bronze collections, more than in any other are illustrated the extremes of Russian life, one group being devoted to the army and the government, which are virtually the same, and another to the lowly and suffering peasantry. In this exhibit are many pieces by the sculptor Lanceret, whose recent death was a loss to the empire and to art. In addition to these works are allegorical figures and statuettes in solid silver, one of them, mounted on red jasper, representing Alexander bestowing freedom on the serfs, and rescuing Bulgaria from the grasp of Turkey.

Silver-ware is displayed in many rich and attractive forms, much of it belonging to the imperial household. The enamelled variety indicates the revival of an ancient process of manufacture, which is gradually being extended to other countries. Some of the pieces seem almost transparent, so delicate is the material used, the designs being added by pouring melted enamel into the ornamental figures. The skill required to perform this operation and the danger of destroying an entire piece by a single mistake gives to these wares their high marketable value.

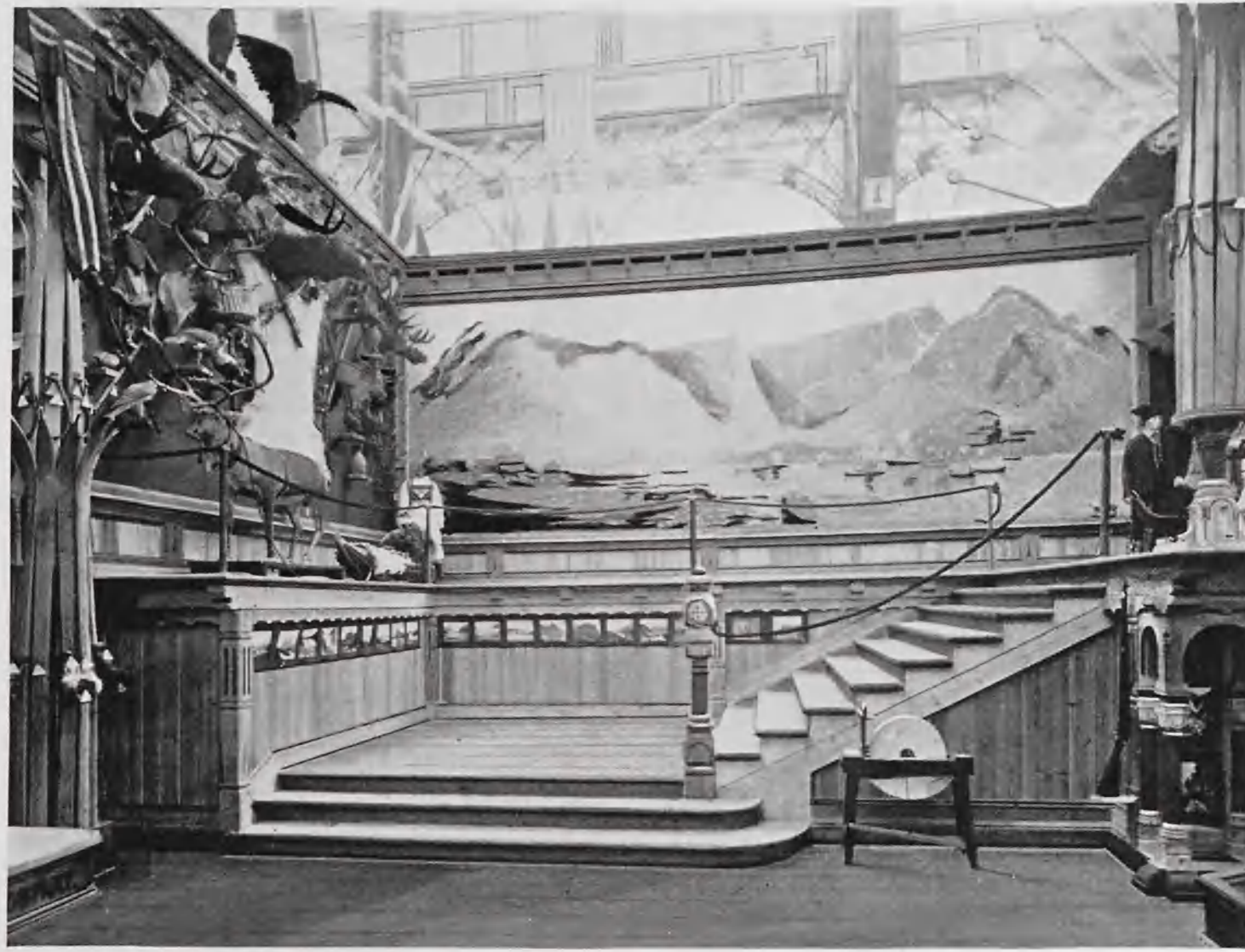
Russian furs, which form a most important article of commerce, are displayed in every conceivable class and form. There are stuffed animals, skins, and robes, with costly garments, composed wholly or in part of furs, such as are worn by the highest officials, and by the titled dames of St Petersburg and Moscow. Garments also may be seen such as the Siberian hunters wear when in chase of the bear, the sable, the otter or the seal. Among other exhibits are many which tend to reveal the more luxurious phases of Russian life. Furniture is shown, made of native woods, artistically carved and ornamented, with the choicest of Russian silks and rich sacerdotal vestments, worked with gold and silver thread upon silken textures. In the more homely groups of cotton and woolen goods, the display is also creditable, St Petersburg, Moscow, and Piotrkov being well represented in these branches. In a word, except for leather goods, the crude metals, and a few other items, the Russian exhibit is almost a reproduction on a smaller scale of the great fair which for centuries has been held at Nijni Novgorod.



RUSSIAN BRONZE



Norway's exhibits are for the most part divided between the Manufactures and Fisheries buildings, but with several in each of these departments which are officially classified with others. The Agricultural division, for instance, including food and its accessories, related machinery, and forest products, is represented in the hall of Manufactures by the displays of milk-condensing companies, of makers of liqueurs, wines, and malt liqueurs, and of the products of wood pulp mills. Various farming implements are shown, and an ingenious milking apparatus operated by a suction pump. The exhibit of timber for house-building purposes is mainly confined to the pavilion itself, which is constructed of Norway pine, and whose façade contains some excellent specimens of native carving in



CORNER NORWAY SECTION



NORWAY SECTION



wood. With the exception of a few designs in simple colors at the main entrance, the pavilion is untouched by paint or oil, and though somewhat overshadowed by the loftier structure of Russia, shows to excellent advantage the natural beauties of Norway pine.

An attractive feature is the collection of Norwegian birds and beasts, including stuffed water-fowl, polar bears and deer, mounted on stands, in cases, or suspended from the walls. Norwegian granites and marbles are displayed in the form of polished columns, fireplaces, slabs for wainscoting, paper weights, and smaller articles. In the centre of the court is a tall monument, each panel representing a different variety of marble, the quarrying of which is a comparatively new industry in Norway. At the back of the pavilion is an exhibit of a national character, prepared by the Norwegian Home Industrial society, and by several private firms which make and export the costumes characteristic of the country. Here may be seen, attired in their usual garb, the Norwegian wife and maid, the peasant and hunter, with birds and animals on every side, and with large photographs scattered throughout the apartment, adding to the realism of the display.

To the tourist and sportsman an interesting feature is the quaint collection of snow-shoes, skates, sleds, and carriages; nor should we omit the models of locomotives, railway-cars, and steamers. One



NORWEGIAN CARVED WORK

of the railway-cars is so constructed that its wheels are adjustable to tracks of various widths. There are also models of the tourist steamers *Venus* and *Mercury*, which travellers in picturesque Norway will doubtless recognize. The snow-shoes are of all patterns, from simple strips of wood with a strap in the centre, to such as are delicately inlaid with mother of pearl, while the skates vary in style from wooden articles with heavy steel runners which turn up at the toe to those of modern make, fashioned of aluminum, and with the lightest of blades.

The industrial products of the peasantry are illustrated by choice specimens of embroidery and needlework, and by ingenious wood-carvings in the form of boxes, card-receivers, photograph-cases, paper-knives, spoons, and tankards for wine and beer. Elsewhere in the exhibits of wood and metal work the convivial habits of the Vikings and their descendants are brought into prominent notice. Among them are ancient wine-horns, ornamented with silver, which, on festive occasions, the guests were expected to empty a prodigious number of times. Native smiths have also reproduced in silver the massive cups of earlier days, while among originals is a tankard of 1683, and a wine-cup of 1790. Another relic, more admired than any is a crown of silver, made in the





SWISS MUSIC BOXES



SWISS WOOD CARVING





THE PANTHER HUNTER

pre-Columbian voyages. Its furniture is a reproduction of that which is used in Iceland at the present time. Upon the outer walls of the pavilion are also pictures illustrating those stirring times in the northern seas, one of them representing a Danish fleet crossing the North sea in 860, another some primitive craft touching in 980 at a foreign shore, perhaps that of Rhode Island or Massachusetts.

The main exhibits are divided into four classes, and passing through the chief entrance, we come first to the rich display of gold and silver, introduced by the equestrian statue of King Christian, mounted on the charger which for many years he rode on public occasions in Copenhagen. It is made of silver, the work being modelled from a photograph by Heinrich Hansen. Rosenberg castle, the King's summer residence, built early in the seventeenth century, is shown in a model of gold and silver consisting of 1,700 separate pieces. The principal manufacturers of gold and silver-ware also make creditable displays of ancient work, either as originals or imitations.

Prominent among the ceramic wares are those of the royal porcelain factory of Copenhagen, occupying the centre of the pavilion. Among its exhibits is a service, in rococo style, each of its pieces with landscape decorations by a Danish artist, and representing in all the labor of many years. Of works of art in under-glaze there are not a few by prominent members of the royal academy.



HANS ANDERSEN'S ROOM

Elsewhere in the Danish pavilion are figures and vases in terra cotta, with furniture of oak and walnut, wall-hangings in silk and figured leather. Dainty embroideries, laces, and articles of domestic decoration represent the women of Denmark, and the exhibition of the Danish Sloyd association illustrates the system of manual training in the form of an industrial school, with specimens of printing and book-binding presented by leading publishers.

seventeenth century, and worn by the brides of several generations descended from a prosperous peasant's family. A dozen Norwegian manufacturers send their contributions of antique Scandinavian silver-ware and ornaments, filigree and enamel work, the exhibits of gold and silver-ware, jewelry, and other articles of personal decoration, forming one of the strongest features in the Norwegian section.

On the other side of Columbia avenue are the Danish and Swiss pavilions, of which the former is recognized by its lofty towers and its coats of arms. On either side of the main entrance are bronze statues of Thorwaldsen and Hans Christian Andersen, near which are collections of personal relics commemorative of their national characters. In fact, the room is substantially reproduced in which the charming writer of fairy and other tales lived and labored for so many years. His writing desk, inkstand, pens, fire screen made of newspaper clippings, clock, spectacles, pictures, sofa, and several original manuscripts are placed as he loved to see them when in the flesh, bringing his personality home to us as never before. The entire collection was loaned by the royal museum of Copenhagen, which also permits the visitor to linger over many curios illustrating the career of the great sculptor. He it was who built the museum itself, which is here reproduced in miniature, together with most of his works of art which grace it. Side by side with the model is a case containing the hat which he wore at his triumphal entry into Copenhagen in 1838, together with the medal of the order of knighthood conferred by the king, his favorite pipe, cigar cases, match boxes, autograph letters, and sculptor's tools.

The Erikson room, dedicated to the memory of the bold voyager for whom has been claimed the discovery of America, contains rude sketches believed to refer to these



HANS CHRISTIAN ANDERSEN



Entering the dark colored Swiss pavilion, beneath the arch which bears the national cross of red, the visitor finds himself surrounded by colored crayon pictures of the castle of Chillon, Jungfrau, Mont Blanc, Geneva, Lucerne, the Bernese Alps, and other romantic scenery, which serves for a time to draw his attention from the lower planes of industries. Soon, however, he observes that watches and watch-making occupy much of the space, Geneva, of course, making the strongest exhibit. Several of the firms not only display time-pieces, but every portion of their mechanism, an entire family of watch-makers showing how the different parts of the watch are distributed among the cottagers to be finally put together at the factory.

Wood carving is also one of the most prominent industries of Switzerland, where the gables of their houses,



EXTERIOR ITALIAN PAVILION

the framework of their doors and windows, and the interiors of their residences are rich with sculptured ornamentations. The natural taste and skill in this direction, developed by centuries of practice and by the efforts of industrial societies, is now the source of a good revenue, many large firms exporting such articles of virtu to European and foreign lands. Forty of these houses make exhibitions in the Swiss section, and about twice that number of watch-makers and manufacturers of scientific instruments and music-boxes.

At the main entrance of the Italian pavilion, with its dress of cream and gold, is a bronze statue of a lion and his prey, flanked by the famous group of "The Wrestlers," and near by a figure of Augustus Caesar, and tile paintings by Achille Mollica. Throughout this section statuary is scattered in lavish profusion, and the life-like beauty of the creations in pure marble is further enhanced by the hangings of heavy velvet which form the chief accessories to the exhibits themselves. Among them is a Psyche from the studio of Rossa, and images of Rebecca, Esther, and Margherita by one of the few real artists who are also dealers in works of art. Columbus, bent and feeble, is taking his last view of land, and in a somewhat daring combination of marble and bronze is the figure of a female slave, the head, arms, and feet of metal, and the drapery of two varieties of marble so artistically blended that they appear to be cut from a single block. Worthy of note also are those which depict the eager fresh delight of a group of children, for the first time absorbed in the marvels of the stage, in contrast with which are the figures of a little girl, first with a live bird in her hand and then with its dead body, the face and attitude symbolic of joy and sorrow.



In the northern portion of the pavilion are the wooden carvings, not a few of them second only to those in marble. On a large panel of Italian walnut, for instance, are groups of cupids, flowers, and birds of most artistic execution. The famous iron doors of San Marco are reproduced in miniature, and as specimens of furniture carvings are massive and handsomely decorated sideboards, cabinets, settees and mantels. Among others worthy of note are the decorative carvings and figure delineations of Francesco Toso, of Venice, whose death occurred in Chicago while earnestly striving to make the entire exhibit worthy of Italian art and workmanship. Toso was partial to dark-hued woods, and his negroes in ebony will not be soon forgotten; neither will his cupids, having as background garlands of flowers. His masterpiece, however, consists of the figures of Marguerite and Mephistopheles, carved from opposite sides of the same block of wood, their life-like forms reflected in a mirror, so that they seem to be walking together. Other carvings from wood are in the shape of guitar players, gondoliers, punchinellos, etc., illustrative of the gay and grotesque. Still another group represents a score of old-time Italian servants, and there are several specimens in wood is so stained as to resemble

Glass-ware, ceramics, mosaics, and cameos are represented in forms for has ever been famous. The majolica ples, the Byzantine mosaics, the Venetian furniture of all designs inlaid with liberally displayed. Of choicest texture manufacture of which, under the patronage revived a long dormant industry. In the shell with over fifty figures carved upon family of England. Coral jewelry, emshell, and bronzes reproducing many

Pompeian attractions



ITALY

Adjacent western corner the sections old-time de- its gloomy ceilings and impressive salient fea- collection of embroidered features of further tend

state. At one of the entrances is a court inclosed with rich specimens of stained glass and mosaics, with a back-ground of gilded moldings.

Barcelona plays an important part with her exhibits of glass and mosaic work, of rugs and blankets, and other manufactured products of that historic city, still one of the industrial centres of Spain, especially in the production of textile fabrics. Here was held in 1892 an exposition of industrial arts, designed principally to illustrate the technical skill of Spanish working-men, and the best of the exhibits there collected were forwarded to the World's Fair, forming the bulk of the display in the Spanish section. There are silks of antique pattern, swords, ceramic wares and tiles, carvings in metal, chemicals, soaps, cordage, and a small collection of Spanish books. One of the most monumental works contributed by the editors and publishers of Spain is the Spanish and South-American directory. There are also some unique bindings in leather, metal, and wood. Of special interest to women are the point d' Alençon, Chantilly and other laces, and the photograph of the infanta Eulalia, taken in Barcelona many years ago.

The small area originally granted to Portugal was transferred to Italy; but in the exhibits of her former New World empire of Brazil, as also in those of the Argentine republic, a portion of the ancient Spanish vice-royalty of Buenos Ayres, we have sufficient evidence that primitive systems of



ITALY

which the bronze, inlaid work, which Italy ware of Na- tian glass, ivory, are and tracery are the Venetian laces, the age of the queen, has within recent years, case which contains the cameos is a it, among them members of the royal bossed leather work, carvings in tortoise famous pieces of statuary, with replicas of utensils and ornaments, are among the over which the fair pilgrim is apt to linger.

to the Italian division, and in the south- ner of the Manufactures building, are allotted to Spain and certain of her pendencies. The Spanish pavilion, with

arches, its massive pillars, its pink richly fretted ornamentations, is an structure, reproducing some of the more tures of the cathedral of Cordova. A

religious images, tall candelabra and tapestries in which are recognized the the pope and the queen-regent of Spain, to create an atmosphere of church and

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ITALIAN FURNITURE



BRONZES, ITALY

manufacture are being rapidly superseded by modern methods and machinery.

In connection with the Brazilian section, it may here be mentioned that her appropriation of \$600,000 exceeded,

with one or two exceptions, that of any European power, and that this amount has been well expended is nowhere more apparent than in her department of manufactures. Here in truth is one of the surprises in which the Exposition abounds; for by many, even of the more cultured class of visitors, men well informed as to the agricultural and mineral wealth of the young republic, little was expected in this direction except for a slender display of textile fabrics, the fashioning of basket work and of household utensils from clay and cocoa-nut shells, with preparations of tapioca, manioc, chocolate, dye-stuffs, and india-rubber, with perhaps a few hammocks of fine material and workmanship; for to Brazilian Indians is attributed by some the invention of these articles of modern comfort. But entering this section, the first thing noticed is a choice collection of ceramics, mosaics and wall-papers from Rio Janeiro, and the states of St Paulo and Bahia, with saddles richly embroidered in gold and velvet, with inlaid wood-work, and massive ebony furniture. The Columbian era is illustrated in the ethnological division; the nineteenth-century era in the manufactures division. Government is represented by the guns and models of cannon sent from the naval arsenal at Pernambuco, and by the uniformed dummies of officers, musicians, and privates.



ITALIAN DECORATIONS



ITALIAN CHINA





ITALIAN STATUARY

they are merely accessories to the real display of modern industrial life. All the world knows that the republic stands well in primary manufactures of leather, hair, wool, and meats; but here are also paintings of no small merit, with mosaics, bronze figures, delicate wines, liqueurs, chemicals, perfumes, billiard tables, and other articles which show that the Argentinians are not merely an agricultural and pastoral nation. A form of industry, which is neatly represented and is quietly developing into considerable importance is the manufacture of oils from pea-nuts, grapes, and flaxseed, the last in the form of what is commonly known as linseed oil. The country is well adapted to the raising of grapes and barley, and the influence of the Italian, French, Spanish, English, and German elements is seen in the rapidly increasing production of wine and beer, as is fully illustrated in these exhibits. Concentrating her exhibits in this section, the republic also presents specimens of government printing in the way of bank notes and postage stamps, a large frame near by containing the title pages of various literary and musical works issued by publishing houses within recent years. Here also are cases filled with the fancy work made by orphans under the care of the state and the religious orders.

In Mexico's division is fairly represented her industrial progress within recent years, now that the successive administrations of President Díaz have put an end to revolutions, or predatory raids in guise of revolution, which followed the acquisition of independence. Her section is enclosed by a glass partition, on one side of which are specimens of wood carving from old Spanish churches, most of them representing sixteenth century art. On the opposite side are several pieces of primitive artillery, such as were used in the days of Cortés, side by side with models of some of the last pieces of ordnance cast at the national foundry, and among other historic articles near by is one of the swords of Cortés. In a small picture gallery are portraits representing the military and civic leaders to whom the republic has accorded places of honor.

The display of the Argentine republic serves also to counteract the prevailing idea that for the most part it is a country of pampas Indians, who scour the plains in search of cattle and ostriches, ever on the look-out for scattered settlements and wandering settlers. True, in her fine art gallery, installed in this section, is a painting which represent a foray of savages upon a defenseless village; but such scenes are merely incidental, as are those in which the leading rôles are played by gauchos or half-breeds of Spanish and Indian blood, who tend cattle, capture wild horses, protect the frontiers, and wage constant war against the savages of the pampas.

But although long Indian spears and bolas or lassos with iron balls at the ends play a small part in the Argentine exhibits,



INDIA CARVED FURNITURE AND VASES



SPANISH SECTION





ARGENTINE REPUBLIC EXHIBIT

watch-charms, paper-weights, and plaques for the decoration of walls, on the last of which are painted figures typical of Mexican life. Of embroideries, laces, and other delicate fabrics there is a collection which will not suffer by comparison with those of European make.

Somewhat in contrast are the exhibits of Turkey and Bulgaria, the former consisting of a single display of oriental rugs, while the latter has furnished well selected specimens, not only of her manufactures, but of her

The display of manufactures consists mainly of pottery, bronze, onyx, artificial flowers, and textile wares, including, among others, cordage and hammocks fashioned of heniquen fibre, the sisal of modern commerce. Specimens of bronze work and cotton goods of native manufacture represent two of the new industries of the southern portion of the republic. The clay pottery and the artificial flowers are largely the handiwork of the Mexican Indian, who is a deft, though untrained modeller, and possesses in an eminent degree the faculty of imitation. So also with the groups of onyx, whether in slabs or fashioned into such articles as scarf and shawl-pins,



MEXICAN EXHIBIT





PRESIDENT DIAZ

king intrusted the twenty-five of them taken from the royal toms and industries of this whose monarch, ministers, and fidence in the United States foreign powers. The collection ments especially made for the screens, mats and hangings interior decoration of the palace. by the nobles, is not unlike plaisance, but provided with eter, over which is the seat. ever, the chair is borne on the each end. There are also spec- tured by the Coreans, varying stance used to carpet floors is as fine and glossy as silk. jealous as to the secret pro- these fabrics. They claim, Japanese what they know of rather that their southern away their artisans and their teresting of the curios are spec- known as Satsuma ware, the a lost art. The pieces still priceless treasures, kept as heir- another. A bowl, belonging to years old, is of a greenish color, delicate texture, and richly polished and decorated on the outside. Corea also presents an exhibit of her medicines, and is especially proud of the ginseng root, said to be worth almost its weight in gold, and especially esteemed by the Chinese as a curative for disorders arising from the use of polluted water. The curing of tiger skins in which the natives are experts, also forms a considerable source of industrial revenue. Of minerals and metals there is a large collection, and among miscellaneous arti- cles are carpenters' tools, cabinets, lacquer-work, tobacco-boxes, ves- sels of brass and pottery, grains, nuts, seeds, kite-reels, chess-boards, candle-sticks, hairpins, and entire suits of clothing for men and women, showing the national dress of the common people, and of those of high degree. An interesting feature is a group of brass cannon made in the tenth century, about the size of a small howitzer, but with barrels wrought in modern style.

Between the Argentinian and Mexican exhibits is the richly carved, gilded, and colored pavilion in which were housed, at the Paris Exposition of 1889 the exhibits of Siam, and reproducing the garden house of the Siamese king. Although only twenty-six feet square, it is one of the most unique and attractive structures in the

agriculture and her national costumes, those of the peasantry in their gay attire, and those of her soldiery and civic officials. Of wheat in the sheaf and in the kernel, of barley, sesame, and other food-plants there are many fine samples in her neat pavilion. Here also are attar of roses, wines, tobacco, silk, and hand-made textiles, including an embroidered carpet with 500 square feet in area, and in a single piece, while finely wrought harness and wood carvings, with the tall candles made for cathedrals and religious cere- monials, and a hundred other articles illustrate some form of industry or national life.

South of the Ceylonese section is the toy-like pavilion of Corea, for even the so-called hermit kingdom, though yet secluding herself from the influences of western civilization, has sent commissioners and an exhibit to the World's Fair. Of these com- missioners in their flowing silken robes and tall Corean hats, one is the minister to the United States, resident in Washington, and another the secretary of the American legation at Scoul or Seyool, the capital of the kingdom. It was to the latter that the

or more tons of exhibits, most palace, which illustrate the cus- strange and isolated nation, people have probably more con- than they have in any of the includes a variety of silken gar- queen's ladies, and embroidered give the visitor an idea of the A sedan chair, such as is used some of those in the Midway a wheel about four feet in diam- Except on level ground, how- shoulders of servants, six at imens of the paper manufac- in grade from the tough sub- and roof houses to that which The Coreans are extremely cesses by which they produce moreover, to have taught the the manufacture of pottery, or neighbors have forcibly carried secrets. Among the most in- imens of the ancient pottery, manufacture of which is now possessed by the nation are looms from one generation to the king, and more than 500

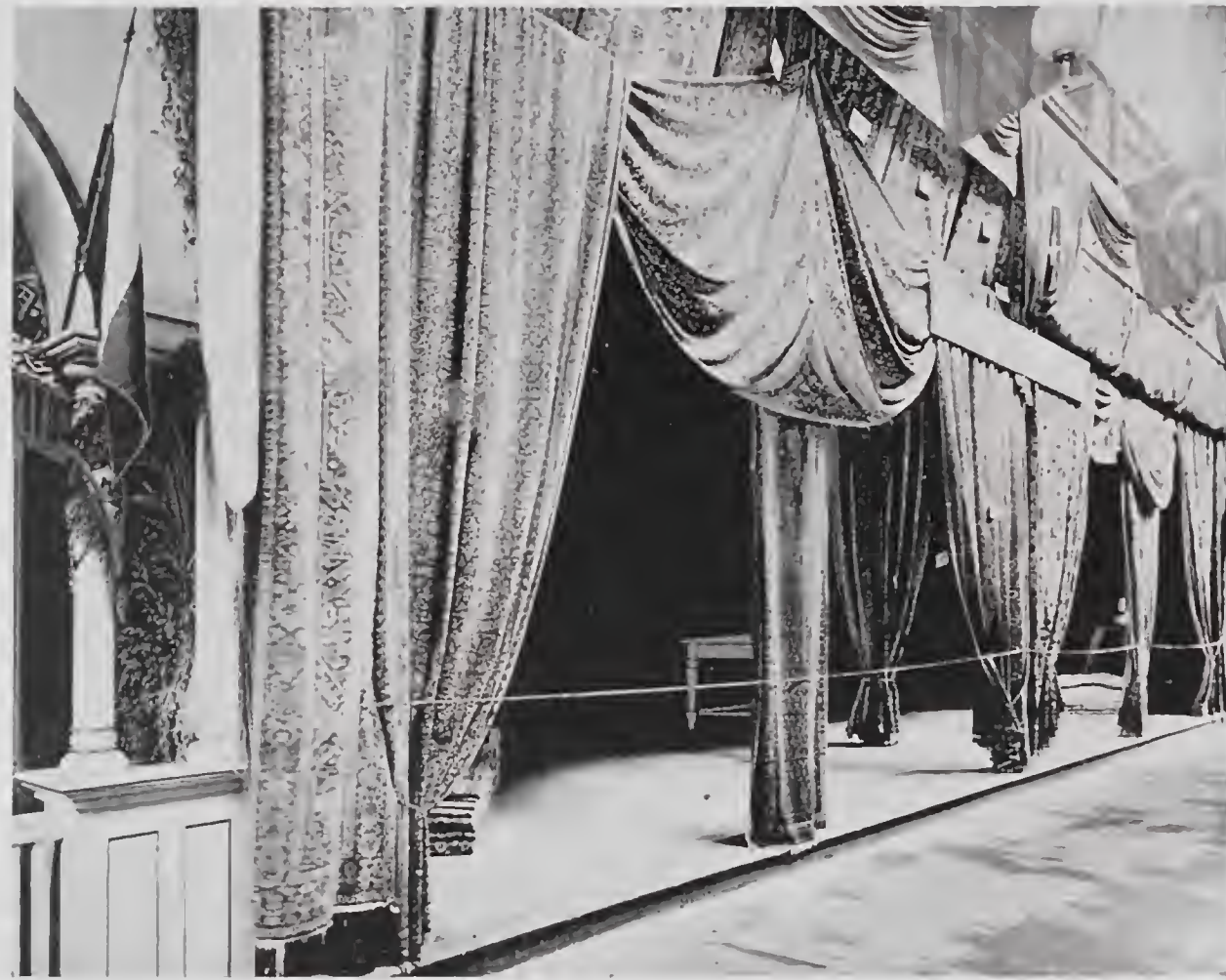


TABLE, MEXICO



INDIA CARVED SIDEBBOARD





OTTOMAN EMPIRE EXHIBIT

the Siamese as with the Chinese, there are many families who live entirely in boats. Within and without the pavilion, are depicted in photographs the royal family with scenes characteristic of Bangkok.

A remarkable piece of workmanship is a series of figures representing Buddha in different attitudes, all carved from solid tusks of ivory, and framed in an intricate floral design. That the stories told of the rich deposits of gems on the banks of the rivers and streams of Siam are not unfounded may be inferred from the collection of rings, bracelets, toilet-sets, and trays, the framework of which is gold, and the decorations diamonds, sapphires, garnets, amethysts, emeralds, and rubies. Of articles made of the precious metals none are more elaborate or richly wrought than rice and betel-nut dishes for domestic use, and the bowls which the Siamese present to their priests as propitiatory offerings. From northern Siam are bowls of delicate workmanship, engraved with the figures of animals, from which are named the Siamese cycles, each of a dozen years. Among the wealth of illustrative material may also be mentioned mattings, screens, priestly fans, made of the leaves of the sacred poh tree, rich embroideries, silks and satins, sets of Siamese money, beautiful caskets of filigree and mother of pearl, samples of chipped meats such as are eaten by the royal family, and plain specimens of native cloths, with models of looms and spindles. Finally, there are skins of the tiger, leopard, deer, buffalo, otter, armadillo, python, rabbit, rhinoceros, and other animals illustrating the fauna of Siam.

Persian industries and Persian life are seen to better advantage in the Midway plaisance than in the small oriental pavilion adjacent to the Spanish section. Here, however, is a collection of native rugs and carpets such as was never seen before outside of Persia. For one of pure silk, with fifty-six square feet of surface, maroon and dark blue in color, and richly embroidered with flowers and figures of birds, \$15,000 is the price demanded. A Bokhara rug, with rich Oriental red ground, an India Cashmere rug, in green and red, with light-colored carpets of mixed Angora wool and silk, and a Sarmarcand carpet from Central Asia, are a few of the fabrics which cover the floor and walls of the Persian pavilion.

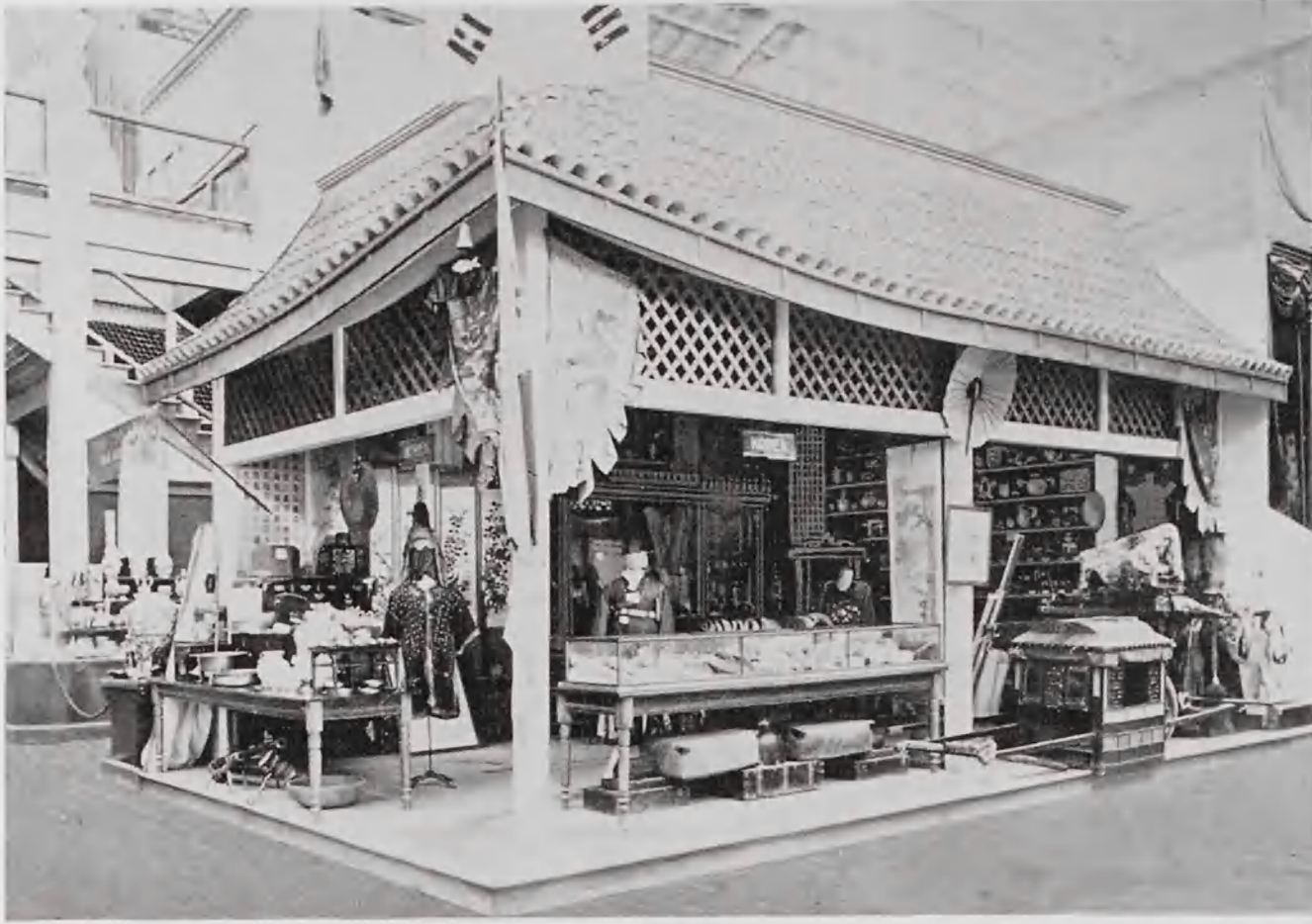
In the southeastern corner of the Manufactures hall is the Chinese exhibit, consisting of ivory carvings, silk fabrics, embroideries, porcelain ware, bamboo screens and fans, mattings, fire crackers

Manufactures hall. The floor is considerably elevated above the dais upon which it stands, is approached by two ornate stairways, and open on all sides, its sharp gables and slender pillars, being painted red and yellow, and decorated with pieces of glass and broken pottery. As remarked by a spectator, the structure resembles nothing so much as a large piece of jewelry, one of the settings of which is a pair of elephant's tusks, flanking one of the entrances, and curving gracefully from the floor to the sides of the pavilion for a distance of nine and a half feet. These were taken from a domesticated animal, and are among the largest in the world. Here also is a display of gongs, drums, guitars, violins, chimes of bells, harmonicas, and zithers, with models of Siamese houses, carved from wood beneath the projecting eaves, these, with the models of native boats, suggesting the city of Bangkok with her cumbersome river craft, and the half nautical life of her common people, for among



BULGARIAN SECTION





COREA EXHIBIT

peror Ching Tai, of the Ming dynasty, about four centuries ago. Side by side with a portrait of the merchant, is that of Lee Hung Chang, viceroy and statesman. In adjoining booths two other merchants display their specialties in ceramic wares and mattings.

Of the \$630,000 appropriated by the Japanese government, a considerable portion was expended on her exhibits in the hall of Manufactures, adjacent to the Austrian section; and here is sufficient evidence of the growing commercial intercourse between that country and the United States. Already the trade between the two countries exceeds forty-four millions a year in Mexican silver dollars, of which the exports from Japan

and other miscellaneous articles. On account of the partial rupture of friendly relations with the United States caused by the exclusion act, China has sent us, not a representative national display, but rather one gathered together by a few wealthy Chinese who have business interests in this country. In the booth of a Canton merchant its wooden enclosure is decorated in the fashion peculiar to the Chinese, and fastened to it are tiny carvings of joss-houses, pagodas, dwellings, and shops, from the windows and doors of which protrude the most grotesque of figures. Gold, red, and green are the most prominent of the decorative colors. Within are some wonderful carvings in ivory and sandal wood, beautiful silk embroideries for screens and dresses, ebony furniture gilded or inlaid, ebony or ivory boxes, and richly enamelled vases, one of the last made for the em-



SIAM PAVILION



constitute over three-fourths; more than a quarter of her foreign, and nearly half of her total export trade, being with the United States. Among the main articles of export are porcelains, textile fabrics, metal, and lacquered wares, all of which are liberally represented at the Fair. The display is, however, less unique than at the Centennial

Exposition, when for the first time was presented a complete collection of the native manufactures of Japan. Then it was that a great demand was originated for Japanese articles, especially in the way of ornamentations, one that even now is observable in many American branches of artistic manufacture. As a result, the simple characteristics of earlier Japanese work have become somewhat vulgarized; for the restless commercial spirit has seized upon Japanese and American alike, and lowered the former standard. Nevertheless there are many specimens representing the purest results of Japanese handicraft, so that the visitor may judge for himself as to the genuineness of what they have been taught to believe were true samples of Japanese skill and taste.

Among the best are the porcelains, of which a number of manufacturers have contributed beautiful specimens, some avowed imitations of the Chinese school, but, as is claimed, not fashioned merely from commercial considerations. Besides dishes, vases, and other articles, such as are usually composed of this material, there are busts and figures of Kaga porcelain, neatly molded and skilfully painted. The portrayal of figures in porcelain is something new

to Japanese art, and a feature of additional interest is that the pieces represent with considerable fidelity of delineation, such personages as Columbus, Washington, Lincoln, and Grant. By a secret process the gold and colors used are so absorbed as to be virtually embodied in the work.

Another variety is the cloisonné ware with its metallic enamelling, of which there are two vases more than eight feet high, and among the finest examples of Japanese art. The process of manufacture requires no little patience and skill, for the enamelling often requires several



applications, and the pieces are thoroughly polished after each firing. Upon these vases are elaborate designs representing the four seasons, and such political events as the threatened annexation of Corea by China or Russia. Flowers, birds, snow scenes, eagles and domestic fowl, are interwoven in intricate fashion, while the crysanthemum and kiri blossoms, national symbols of Japan, appear between the rising sun and the American flag, indicative of the cordial relations existing between the two nations. On the stand of keyaki wood, on which they are mounted, are reproduced in carvings seventy distinct varieties of flowering plants.

Mounted on a pedestal at the northern end of the section is a marvel of imitative workmanship in the form of an iron eagle, two feet in height and five between the tips of the wings, each feather, of which there are several thousands, being separately traced, and containing as many as a thousand lines. Here was a five years' continuous task, and in order to make a perfect model, the artist secured two eagles, one of which he stuffed, keeping the other alive that he might watch its movements. Among the carvings in bronze, the most noticeable are those which show the native falcon in a dozen lifelike forms, and suggest the sport derived by the ancient daimyos of Japan. Of carvings in wood, there are many specimens, one of the most striking of which is a model of the famous pagoda at Kyoto, known as Yasaka, and destroyed by fire many years ago. The original was a piece of hand carving in wood, as is the model, the latter requiring the services of thirty-seven skilled workmen for an entire year.

Most of the articles in wood and ivory carvings are of ingenious design, in striking contrast, as are the



JAPANESE VASES





ceramic wares and mosaics, with the crudity of much of the workmanship now palmed upon the public as of Japanese production. An attempt to check this imposition has been made by the government art school in Tokio, from which many delicate carvings have been sent to the Fair. In the line of decorative metal work, also, the government illustrates the skill of native artificers with specimens of artistic handicraft from leaders in that specialty.



JAPANESE VASES

There is, for example, a rich piece of chisel work in the form of a plaque, made of a mixture of gold, silver, iron, and copper, upon which figures are engraved representing a flock of herons, with effects of light and shade unknown to western artists. As a rule, Tokio furnishes the best of artists and artisans, which, by the way, in Japan and the east, are much more nearly synonymous terms than in the United States. Lacquered wares are seen in quaint and beautiful forms, and there are gold boxes covered with wrought flowers and butterflies, writing-cases covered with marine views, toilet sets, fans, tables, and an endless variety of useful and ornamental articles in such profusion as to forbid a description in detail.



JAPANESE BRONZES

Of silks, embroideries, tapestries and ornamental needle-work there is a choice display, and especially is this exhibit an illustration of the facility with which the Japanese adopt the best features of the products of other nations. Many years ago, one of the most skilful weavers in Japan was so impressed with the beauties of the French Gobelin tapestries that he commenced to copy them for the benefit of his countrymen. Competent judges of his work, as seen at the Fair, now assert that the texture of these tapestries is finer and more durable

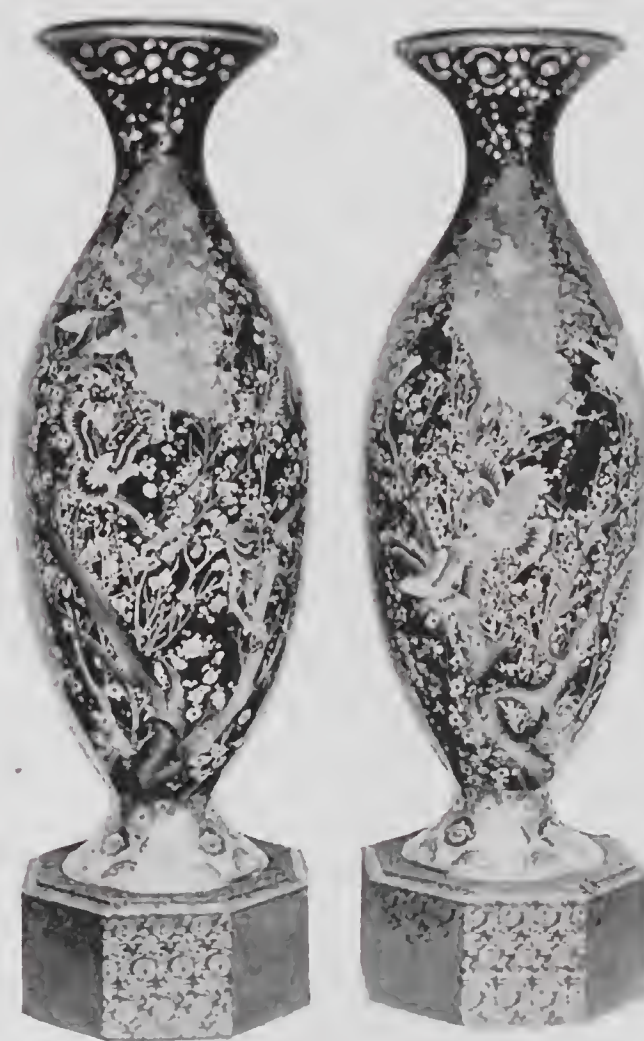
than that of the true Gobelin, while there are depicted scenes from national life with an accuracy of detail beyond the best efforts of western masters. The principal work represents one of the religious celebrations held annually at Nikko; a temple with surrounding structures and foliage, and a procession of some 1,500 figures, the entire scene, as to architecture, costume, perspective, and atmospheric effects, as clearly presented as though depicted on canvas. Upon rich velvets are also views of the eastern empire, interior sections of Japanese houses, and other specimens of art in which the work of the dyer, the artist, and the manufacturer seem merged in one. In embroideries and pieces of pictorial needle-work many are almost as ambitious, but, although the results are usually more gorgeous than in the products of the loom, they fall short of them in artistic qualities.

In the Japanese pavilion there are specimens of nearly every class of



JAPANESE SECTION

manufacture, from the art works which we have noticed to toys, walking sticks, paints, dyes, varnishes, drugs, and stationery. But the chief interest



JAPANESE VASES

centres in the articles which tend to beautify the interior of homes, or to ornament their pleasure grounds. No feature in the exhibit attracts more attention than the model Japanese house, with its screens, its light and simple furniture, its silk drapings, lacquer and gilt ornaments, vases, and household implements and decorations. Here are real





A COLLECTION OF BRITISH SILVER WARE





JAPANESE CHINA

floor are the largest horse and alligator skins that have ever been tanned, each thirteen feet in length, and mounted with the head of the animal from which it was taken. California has a structure of walrus hide, inlaid with many varieties of leather; Mexico, a unique display of furs and skins, and the central figure of the Brazilian group is a mammoth globe, covered with samples of rough leather. There are calf skins almost as soft as silk, kangaroo skins, an elephant's hide with a surface of more than 300 square feet, and cases filled with chameleon, lizard, and anaconda skins from Latin America and Asia. On the walls are displayed the horns of animals which furnish the raw material of the leather industries; of stuffed specimens there are enough to stock a museum, and here and there are niches filled with such curios as a milk bag of goat-skin from Jerusalem, a water bag from Jaffa, and the head of an Amazonian Indian, with bones removed, leaving only the shrunken flesh and cuticle. But of the primary descriptions of leather, one of the finest specimens is in the form of a belt 200 feet long and twelve in width. In belting and sole leather, New York, Pennsylvania, California, and Ohio are especially prominent, the American Oak Leather company, of Cincinnati, furnishing a striking example of the uses to which the heavy grades may be put, in its pavilion of grained leather, closely resembling black oak and mahogany.

But foot-wear leads all the other classes, the factories of America competing with those of France in

Japanese apartments furnished by the most competent of native artists, so that those who would see for themselves the homes of the wealthier Japanese can find no better opportunity than is here afforded them.

In addition to the home and foreign manufactures already described are certain collections classed under that department, but housed in separate buildings, either through lack of space or for other reasons that need not here be mentioned. These are the Shoe and Leather, the Merchant Tailors', and the Krupp exhibits. The Shoe and Leather building is a plain, substantial, two-story structure, suggestive of an eastern factory, and as it would seem, somewhat out of place in its location by the lake front, near the convent of La Rabida. Of the \$100,000 subscribed for the erection of this edifice and the organization of its exhibits, about sixty per cent was contributed by the New England states, largely by Massachusetts. Of the total exhibiting space, 15,000 square feet in the centre of the building were allotted to foreign participants, mainly to France and Russia, both of which nations have furnished an elaborate display. On the ground floor, in addition to foreign exhibits, are collections of leather and leathern goods. The galleries are filled with the best and most recent machinery, some of it in operation, for the manufacture of various grades of shoes; and there is a model factory in running order, with a capacity of a thousand pairs a day.

Among the more striking exhibits on the ground



BRONZE PAGODA





POSING FOR PHOTOGRAPH, SHOE AND LEATHER EXHIBIT

the finer grades. There are shoes made of alligator skin, of buffalo, and horse hide; there are heavy Russian boots, with wooden soles, and solid, spiked shoes from Switzerland; there are dainty kid shoes of many buttons, and satin slippers from Spain, with numberless varieties and grades from France and the United States. Of morocco and dongola goods France and Germany have each a choice collection, while the United States excels in patent and enamel shoes. On the walls are several hundred water colors, representing the various styles of foot-wear used by the leading races of the world for three or four thousand years, with cases filled with models adapted to all climes and nationalities. Among them are velvet-lined shoes for dainty Burmese ladies; shoes with turtles' claws protruding from the toes, such as are worn by the African savage; the huge wooden clogs that the Dutchman wears; pattens with stilts attached for Japanese tea pickers; embroidered shoes with toes upturned for the Chinaman and Corean, and shoes lined and tipped with fur for Swedes and Russians, the scented jeweled slipper of the harem favorite, and the sandal of the Egyptian water carrier; all these with foot-wear

for every people under the sun, from the Eskimo to the Patagonian, and from the Laplander to the Persian.

In decorative leather work the Russian exhibits contain some remarkable specimens. Harness leather in black, buff, and russet colors, is shown in a variety of forms by most of the participating countries, and from Cape Town comes a collection of trappings used by the Boers, together with a number of leather ornaments culled from Zulu territory. There are Chinese swords, with carved or stamped leather hilts; Moorish scimitars and Soudanese swords and daggers decorated with leather; Zulu shields of rhinoceros hide, and leather war belts from Abyssinia studded with precious stones and scarred with the marks of battle.

South of the Illinois state building is a miniature reproduction of the Acropolis, with the orthodox porticos in front and rear, and with broad stair-ways leading to the water's edge. Approaching this classic structure, the visitor inquires as to its uses, expecting perhaps to find there a collection of works of art, and probably the



EXHIBIT SHOE AND LEATHER BUILDING





MODEL OF FACTORY

by-gone days, so graphically depicted by Charles Durand.

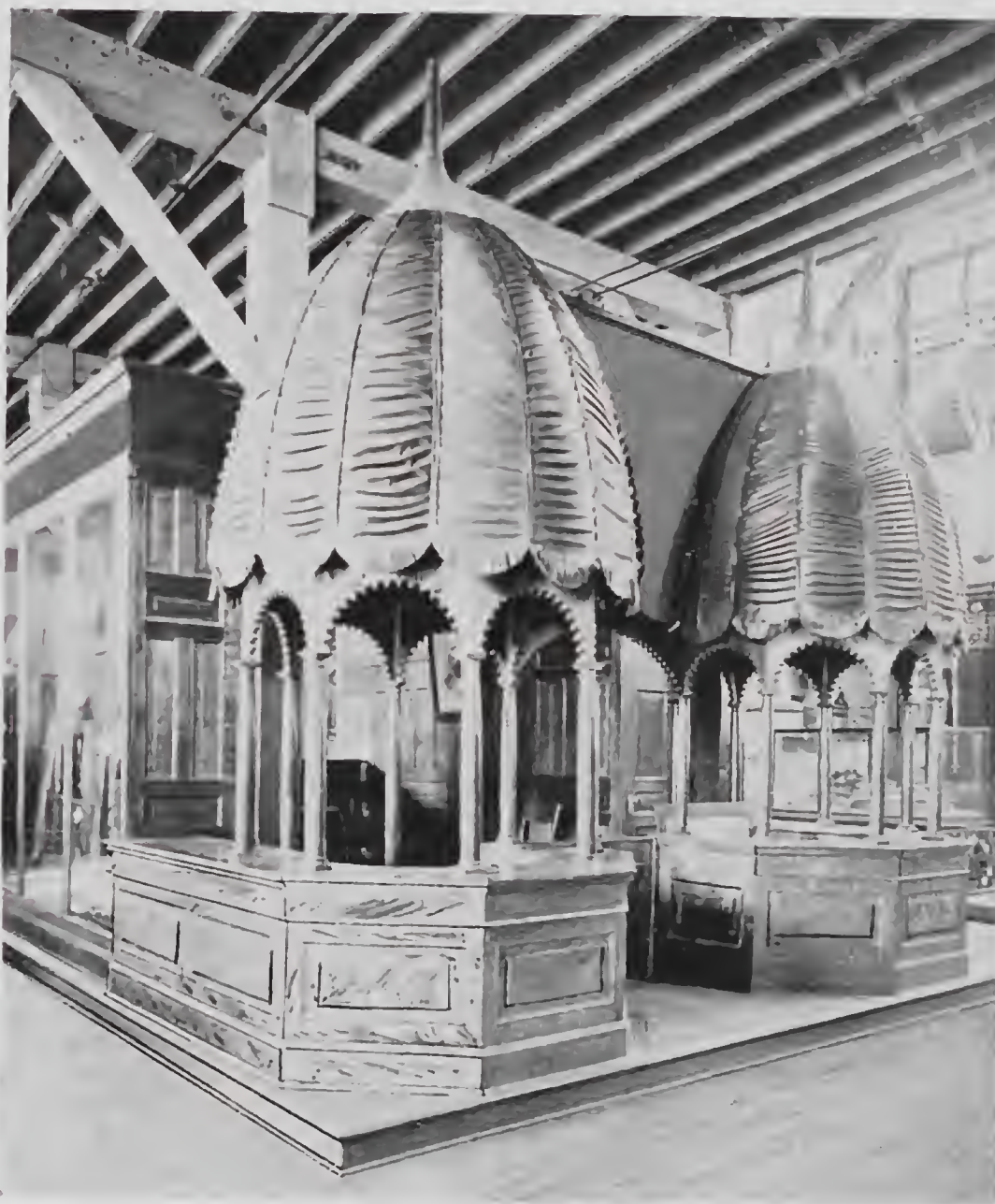
Surrounding this circular court, laid in light colored mosaic, are rooms designed for business purposes or friendly meetings; but the tailor's pavilion is not merely a resort for members of the craft with their friends and families, for here are many typical exhibits, including, as an illustration of the perseverance and ingenuity of olden days, a colored cloth, hand stitched, and made of nearly 6,000 pieces of tailors' goods. Neither stitch nor seam is in sight, and to complete this remarkable specimen of workmanship was the eight years' task of its artificer. On wire frames and wax dummies are displayed the styles of costume prevalent in social, court, and military circles. Here, for instance,



BRAZILIAN SECTION SHOE AND LEATHER BUILDING

last that he thinks of is the purpose to which it is put, for here is the Exposition home of the merchant tailors of the United States. Entering this pavilion, of which the interior is finished in cream and gold, and with appropriate mural decorations, we read on the panels of the rotunda the following biblical inscriptions: "And they sewed fig leaves together, and made themselves aprons." "Unto Adam also and his wife did the Lord God make coats of skins, and clothed them."

On the dome above, supported by Corinthian pillars, are paintings representing the evolution of the tailor's art, beginning with Adam and Eve, in primitive attire, and then the barbarian, somewhat more advanced in costume, followed by the Egyptian, the Greek, the citizen of the renaissance period, and of the era of Louis XIV—XVI, and so on up to modern styles of dress. In one of the mural paintings is the scene in a tailor shop of



LEATHER PAVILION

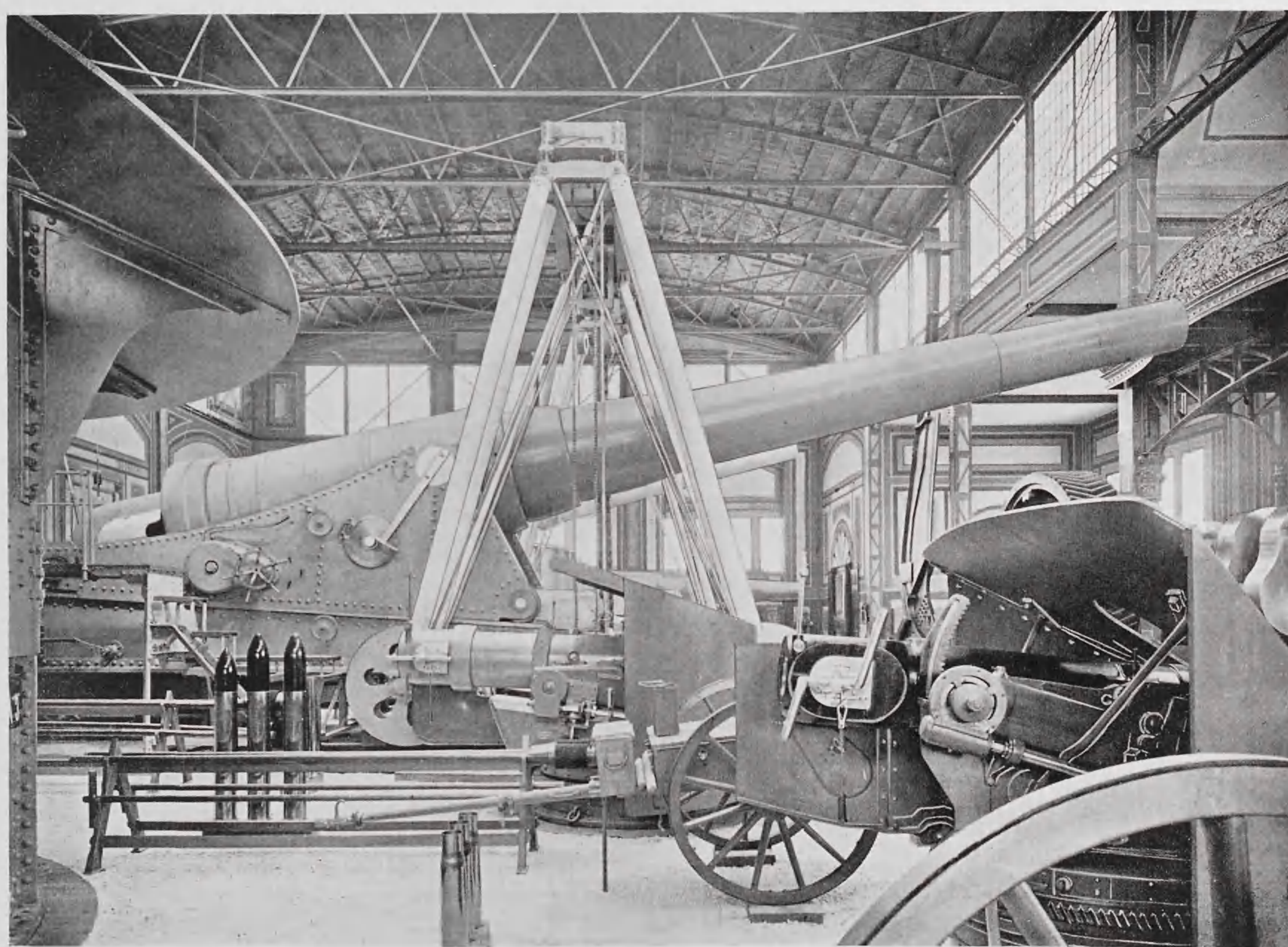
are the tailor-made trappings of Queen Victoria's ladies-in-waiting; the liveries of her coachmen, and the uniform of General Miles, with business, dress, and other suits, reversible garments, and costumes decorated with devices suggested by the Columbian anniversary.

On the lake shore, south of the convent of La Rabida, is a castle-like structure, with towers at either end, typical of the Fatherland, and on its eastern side a tower decorated with the shields and coats-of-arms of the several German states. Here is the exhibit of guns and missiles, mammoth and miniature, manufactured at the Essen works of Friedrich Krupp. Extending along the western wall of the pavilion are sixteen monster guns, with their cavernous muzzles pointed lake-ward. The giant of the group, protruding from the centre of the array, was installed in its position after





KRUPP BUILDING GERMANY



INTERIOR KRUPP BUILDING, GERMANY





MERCHANT TAILORS' BUILDING

upward at an angle of forty-five degrees and then can see only its under surface, supported on a carriage of massive and complex design, and around it the steam and electric appliances whereby is brought into play its awful potency for destruction.

Around the great guns are their projectiles, by the side of which are thick plates of armor, torn like folds of paper. Beneath the monster weapon, the largest in existence, is a tiny gun which has seen service in the hands of an African bushman, and near by are the smallest of mountain howitzers, such as may almost be carried by a man, and are often strapped to the backs of mules.

The eastern portion of the building is devoted to such exhibits as the prow, rudder, shaft, screw, and other metallic portions of a modern steamer, with a shaft ninety feet long and three

in thickness. There are also steel driving-wheels for locomotives, and protective plates for the bows and sterns of merchant vessels. In a word there are few articles of steel, whether pressed or forged, such as are used for protective purposes, which have not a place in the collection, for in these works are more largely produced the means of defense than the engineering of destruction. On the walls are photographs and paints of the Essen fac-



WHALER "PROGRESS"

tory, and in the office are models of the ancestral home of the Krupps, and of the monument erected in honor of the late Alfred Krupp through the voluntary contributions of officials and workmen. In the centre of the pavilion are the so called glacier fountains, cooling the atmosphere, and serving as a relief to their sombre environment.

Finally there is a wrought-iron balcony, designed and executed by citizens of Düsseldorf, from which is an excellent view of the building and its contents.

WORLD'S FAIR MISCELLANY.—Of the 16,500,000 feet of lumber consumed in the hall of Manufactures and Liberal Arts, more than 3,000,000 feet were for the flooring and underpinning, and the foundations of the girders, the remainder being principally used for the galleries. All of it came from the northwest, except 4,000,000 feet of southern pine. The main floor is two inches thick, and the floor of the galleries one inch. Both were so constructed as to withstand five times the pressure to which they would probably be subjected, mainly with a view to prevent the vibration apt to occur in a less solid building. No danger is apprehended from tornadoes, every pillar in and under the building having a separate foundation, so that it is prepared for the fiercest storm to which the land is subject.

For lighting the Manufactures building there are used five electroliers, suspended longitudinally 60 feet from the roof, and 140

feet from the floor, the central one fitted with 102 powerful arc lights, and the others with 78 lights, each of 2,000 candle power, making in all 414 arc lights and 828,000 candle power. There are additional lights for the aisles, loggias, galleries, and inner spaces, supplementing the main system and giving stronger emphasis to the grand proportions of the building. For the great search-light on the northwest corner, already mentioned, it is claimed that a newspaper can be read by its light at a distance of eight miles. The apparatus, which is eight and a half feet in height, includes a mirror, ground and polished on both sides, and a lamp operated by electric motors placed under the platform.

Around the edge of the main semi-circular roof is a promenade, nearly a mile in length, reached by elevators running to a platform beneath, from which a stairway leads to the roof. Here the city of the Fair and of Chicago may be viewed from a height of 240 feet,

an eventful journey, attended by special envoys, and hauled through several states on a car made specially for the purpose.

In this weapon it would almost appear that the limit of size and carrying capacity had been reached; yet many a time before has this been vainly predicted. To say that the gun will throw as a projectile for a distance of twelve miles a solid ton of metal, that to start this missile on its way requires a quarter of a ton of powder, that the gun itself weighs 101 tons, affords but a feeble description of the great leviathan of war.

From the floor of the building we look



INTERIOR MERCHANT TAILORS' BUILDING



and on a clear day the cities on the opposite side of Lake Michigan are distinctly visible.

The work of installing the exhibits in the Manufactures building was finally completed on the 17th of June, on the evening of which day a reception was held, with formalities suitable to the occasion. For two years the chief of this department, James Allison, labored without ceasing to insure its success, finally "presenting, under one roof," as he says, "in a congruous, comprehensive and representative series of exhibits, the results achieved in most of the great divisions of human industry and ingenuity."



The following regulations, framed by Mr Allison, and approved by the director-general, apply also to other departments of the Exposition, in addition to the general regulations already mentioned. Exhibitors must be producers or manufacturers of the materials or finished goods intended for exhibition. All applications must be accompanied by a suitable diagram, on a stipulated scale, explaining the plan and distribution of the exhibits. No fire, inflammable oils, or other combustible materials would be allowed within the building. All designs for pavilions or other structures, and for platforms, cases, and partitions were subject to approval by the director-general; platforms to be not more than seven inches, and counters two feet ten inches above the floor, with railings two feet six inches above the platforms, all to be kept within the space

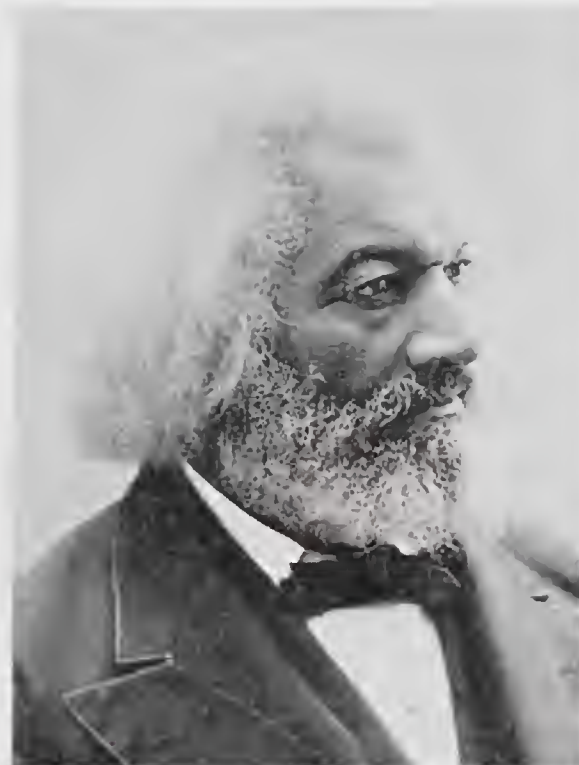
assigned to the exhibition. Signs must be so placed as not to obstruct the light or view, of uniform design, and must not be made of inflammable materials.

In one of the cases in the Tiffany pavilion is an interesting collection of precious and other stones, including the largest rock crystal found on this continent, and an engraved diamond, the only one in the United States, the cutting of which was performed at intervals extending over five years. The display of gems in this pavilion includes about 10,000 diamonds, and of pearls an unknown quantity, the latter valued at little short of \$400,000. There is also a complete assortment of precious and other stones, such as are used in the lapidarian art, from their crude state as contained in the matrix to perfectly cut and polished gems. At times are shown in practical operation the processes of cutting and polishing diamonds.

To the groups in the American section, consisting of woolen goods and mixed textiles, contained in square black cases of unsightly aspect, and contrasting somewhat sharply with the tasteful foreign pavilions on the opposite side of the nave, was given the name of the Undertaker's section of the Manufactures department.

Of gas stoves, apparatus, and fittings, there is a large display, though not so large as was anticipated, for it was the original intention to erect a separate building for the purpose. Two Chicago firms have an elaborate collection, including the latest devices in the way of burners for heating or manufacturing purposes, so constructed that gas and air form a clear blue flame of great power. There are also instantaneous heaters, of American make, attached to bath tub and other fixtures, and heating water to the boiling point in the briefest space of time.

The exhibit of shirts in the clothing group is mainly by New York manufacturers and the Zions Coöperative Union of Utah. On this class of work sewing-girls in the eastern states average only some \$5 a week, much of it being done by charitable institutions, while the shirt-makers of Utah can earn from \$8 to \$10 weekly.



FRED DOUGLASS







## CHAPTER THE TENTH

### LIBERAL ARTS



THE department of Liberal Arts was assigned a floor space of 400,000 square feet, or more than ten times the room allotted for similar purposes at the Centennial Exposition. It was at first intended to place the exhibits in the southern end of the hall of Manufactures, and about equally divided between its ground and gallery floors. But as finally arranged, the only group on the main floor is that of musical instruments, which occupies nearly 70,000 feet in the southeastern portion. Here is a large and varied display of organs and pianos, fashioned by some of the foremost makers in the United States, with historical collections and handsome pavilions devoted to special exhibits, national and individual.

Of foreign powers only Russia and Austria are represented by small exhibits, the Austrian collection forming a combined display of Viennese musical manufactures, among which the zithers are especially noticeable for superior workmanship. The entire department has many specimens of self-vibrating pieces; of stringed instruments played with the fingers and the bow, as banjos, guitars, harps, and violins; those provided with key-boards, and wind instruments, from simple fifes to complicated orchestral pieces or huge orchestrions.

Chief among the historic groups, and indeed the only one that can be termed a purely historic collection, is that of L. Steinert, of New Haven, who exhibits, among other curios, Bach's clavichord, one of the earliest of keyed instruments, which gives forth a thin and feeble tone. The collection includes several specimens of old-fashioned harpsichords and spinets, among them Mozart's spinet, upon which he composed many of his grand sonatas. There is also Beethoven's grand piano of six and a half octaves, with frame of rosewood and hinges of brass. Near this is Haydn's piano in a white oaken case, of deeper and fuller tone than most of the earlier instruments.



SELIM H. PEABODY



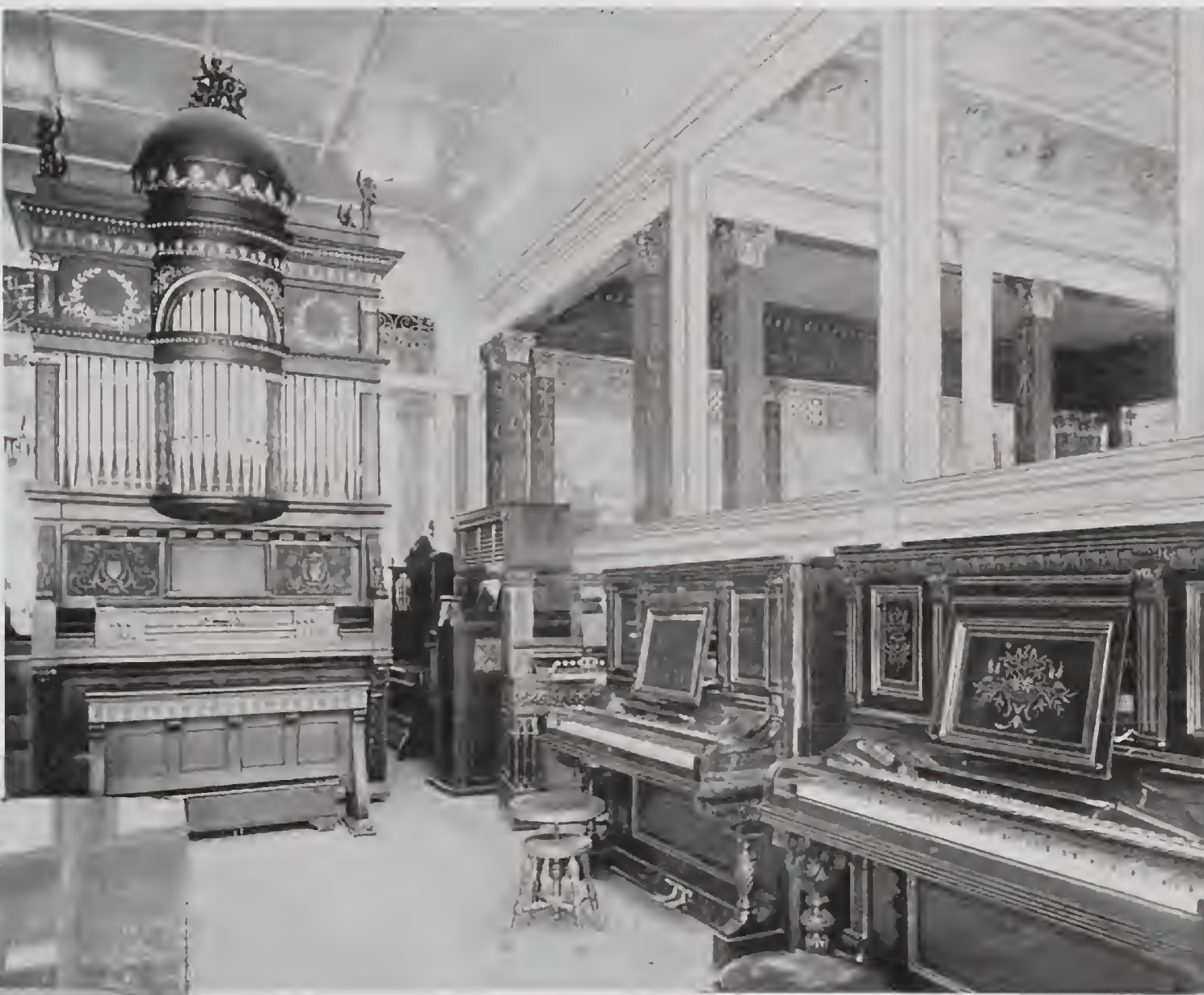
THE OLDEST PAPERS IN THE WORLD





VIEW FROM GALLERY OF MANUFACTURES BUILDING

from forest woods in the Adirondacks. In their pavilion are also illustrated the various processes in the manufacture of felt, from the raw material to the finished product. A Boston house exhibits in the way of musical specialties pianos, cabinet organs, and Liszt, or chapel organs, one of the last decorated in white and gold, and its pipe top representing the Bay State capitol on Beacon hill. But the largest collection is that of a Chicago firm, in whose two-story pavilion, decorated in terra cotta and gold, are many rare and costly instruments. One division is filled with harps of massive workmanship, highly polished and ingeniously decorated, ranging in value from \$700 to \$2,200. In an adjoining case are dainty



ORGANS AND PIANOS



CHAIN ACROSS THE HUDSON AT WEST POINT, 1778

Other interesting relics are an eighteenth century harpsichord, with double board and keys of tortoise shell and ivory, its case profusely decorated with floral designs, and a piano built in London in 1776 for Martha Washington.

The exhibits of the United States cover the entire range of musical appliances, including not only all modern instruments, but their accessories, and the materials of which they are made. New York manufacturers display, for instance, felts, hammers, wheels, discs, and cones, with spruce sounding-boards made

from forest woods in the Adirondacks. In their pavilion are also illustrated the various processes in the manufacture of felt, from the raw material to the finished product. A Boston house exhibits in the way of musical specialties pianos, cabinet organs, and Liszt, or chapel organs, one of the last decorated in white and gold, and its pipe top representing the Bay State capitol on Beacon hill. But the largest collection is that of a Chicago firm, in whose two-story pavilion, decorated in terra cotta and gold, are many rare and costly instruments. One division is filled with harps of massive workmanship, highly polished and ingeniously decorated, ranging in value from \$700 to \$2,200. In an adjoining case are dainty mandolins and guitars, one of the latter a Stradivarius of the date of 1680, for at times the great artificer fashioned other musical instruments than violins. In an adjoining section is an array of banjos, and elsewhere are bass drums, and huge batons with massive heads of gold and silver. Together with the drums and batons is a strange looking stringed instrument, the body of which is a large bamboo. This is a reproduction of the mahati, or great vina, one of the favorite instruments of Upper India during the thirteenth century. In this pavilion a winding stairway leads from the main exhibits on the ground floor to a small recital hall above, where daily concerts are given by performers on the harp and guitar.





CONGREGATIONAL CHURCH

But the bulk of the musical exhibits, and the choicest specimens of mechanical and artistic workmanship, are found in the hundreds of pianos, which testify more than all else to the growing tastes of a music loving people. Mahogany, rosewood, satin wood, ebony, cedar, oak, ash—all the cabinet woods of the tropic and temperate zones—enter into their construction. Some are enamelled; some are finished in white and gold; others in ebony and gold; many being elaborately carved, though not a few are merely painted by hand. In style of architecture they differ almost as widely as the homes of the Fair, and this remark applies also to the organs, of which there is a choice collection.

To the educational groups were assigned about 175,000 square feet, including the entire southern aisle of the gallery, and a portion of the eastern and western aisles adjacent. Here is probably the most comprehensive



FIRST TELEGRAM



JOHN W. DRAPER



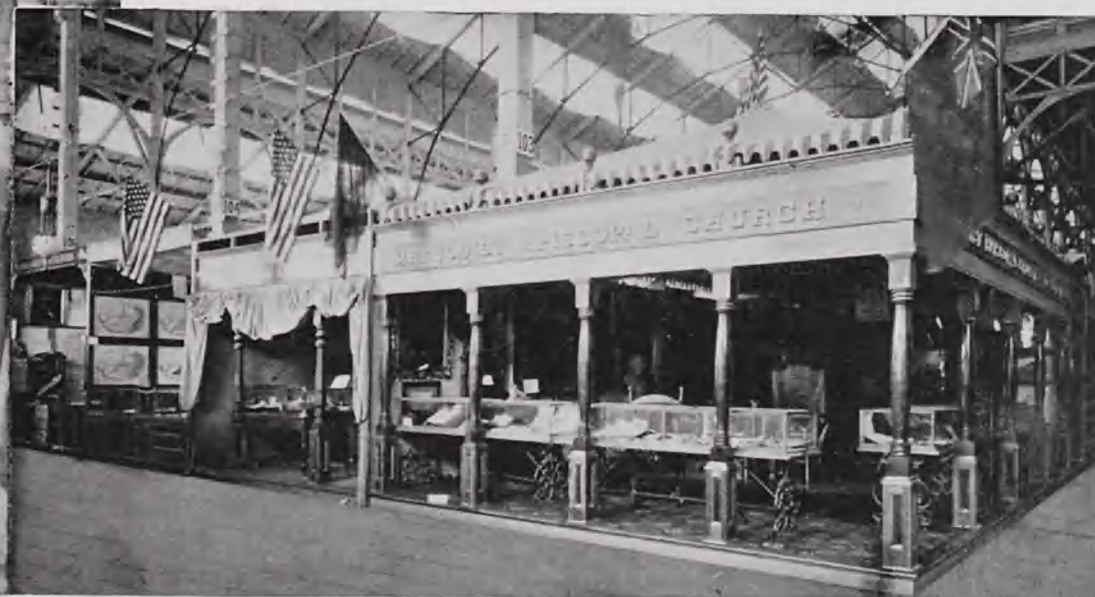
LUTHERAN HEADQUARTERS

collection of the kind ever brought together, including specimens, descriptions, apparatus, models, and programmes pertaining to every grade and class of education, from the kindergarten to the university, and to schools of medicine, law, and the mechanic arts. To these groups more than thirty states and territories have contributed, with several foreign powers, and some fifty universities and colleges; but of the four acres or more of educational exhibits therein contained, only the more salient and interesting features can here be noticed.

In the sections occupied by the United States is fully illustrated the progress of



METHODIST HEADQUARTERS



EXTERIOR OF PAVILION





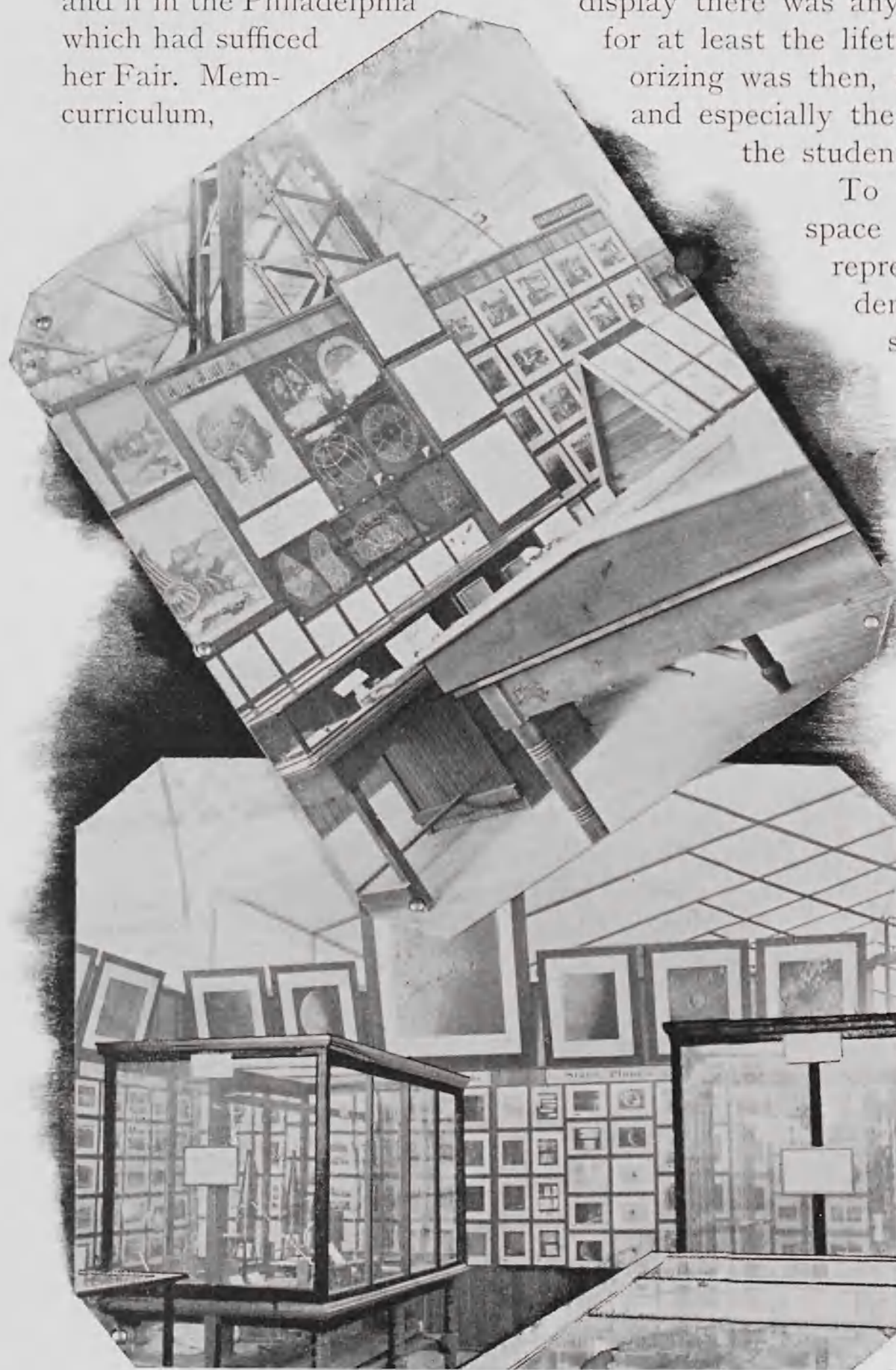
YALE UNIVERSITY EXHIBIT



MISSOURI UNIVERSITY EXHIBIT

educational science within the brief span of years that have elapsed since the opening of the Centennial Exposition. The kindergarten or play-school system which Friedrich Froebel introduced in Germany, well nigh half a century ago, was then in its infancy. As to the Pestalozzian system there were few, even among professional teachers, who knew anything more than its name. Manual training schools were almost unknown, and if in the Philadelphia display there was anything suggestive of methods more advanced than those for at least the lifetime of a generation, it is not recorded in the annals of orizing was then, as to-day it is, an all too prominent feature in the and especially the memorizing of rules which, on leaving school or college, the student will surely make haste to forget.

To each of the exhibiting states is allotted a separate space in the group to which it belongs, and where are represented not only its public school system, but its denominational, normal, scientific, technical, and other schools and colleges. There are also collective exhibits showing the organization and management of school libraries, of commercial and industrial schools, of schools where trades are taught, and of institutions for the deaf and dumb, the blind and feeble-minded. A feature of the entire display is the specimens of handwork, with drawings and maps, essays, and answers to given questions on subjects assigned to the pupils of participating institutions, thus showing the achievements and acquirements of their alumni as the result of scholastic training. Statistics are



HARVARD COLLEGE EXHIBIT

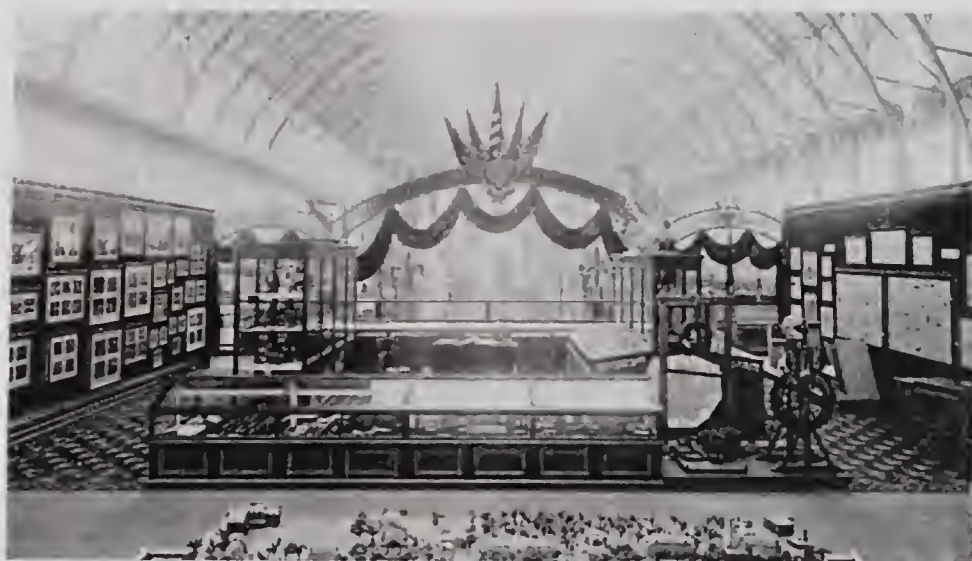


JOHNS-HOPKINS UNIVERSITY EXHIBIT



presented both in the form of school populations, the secondary, and superior education, and other data in

Of the fourteen million represented in the educational about one-tenth belong to the was allotted a liberal space gallery, and thence northward in a parallel line with the Massachusetts section. On a chart fourteen feet square, made by the pupils of the Albany high school, are portrayed in attractive form the school statistics of New York. Of the products of her manual training schools there are selected samples. In 150 phonographs may be noted the various systems of singing as taught in as many schools. Of kindergarten specimens there is a large collection, especially from Rochester, Buffalo, and Albany, with photographs showing the



of text and diagrams, showing ratios of elementary, cation, race, sex, attendance, this connection.

pupils and 400,000 teachers exhibits of the United States, state of New York, to which in the southern aisle of the



PRINCETON COLLEGE EXHIBIT

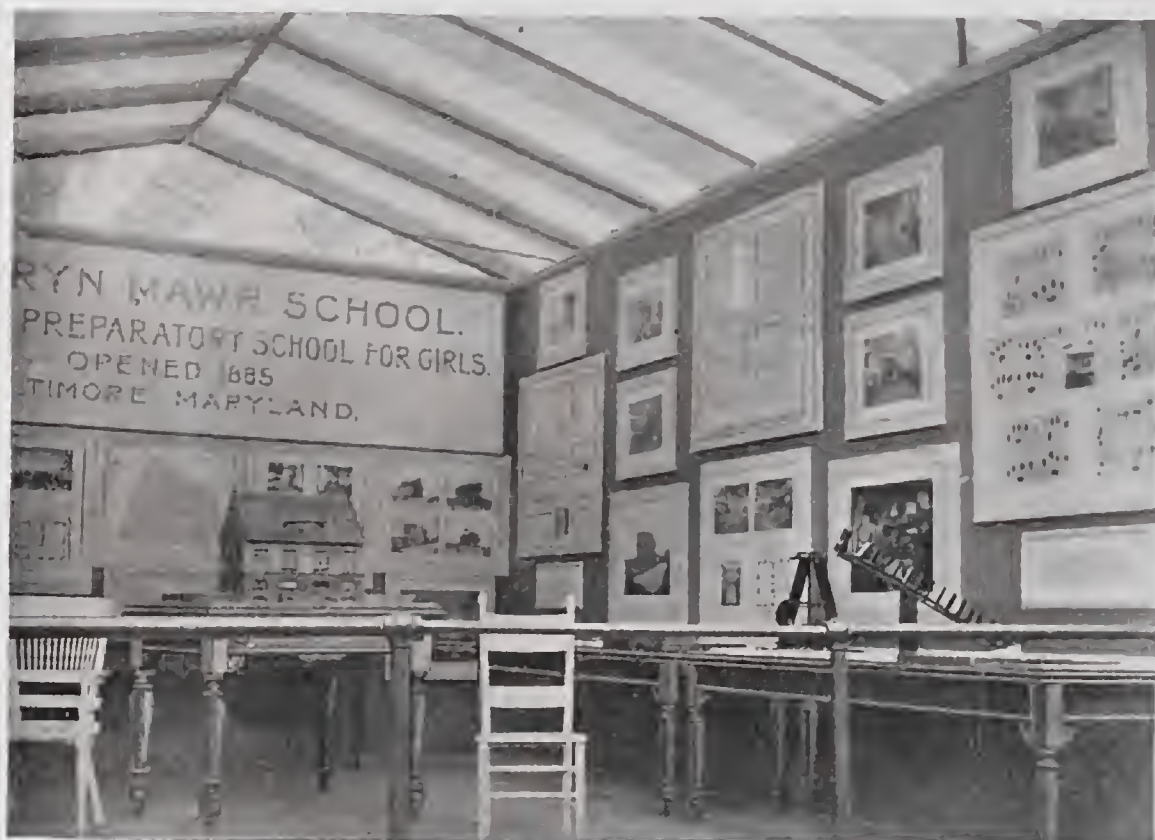


OBERLIN COLLEGE EXHIBIT

children at work or play. Beginning with the best work of the primary grades, we come to that of the intermediate grades, and then to the exhibits of high schools and academies, culminating with those of Columbia college and other institutions in which are represented our higher system of education.

Founded in 1784, the state university has no counterpart in this republic, for with it are affiliated some 500 colleges and academies, and in its system are included the state library, the state museum, and other libraries and museums admitted by the regents to association. The university of the city of New York has on exhibition the publications of the faculty for the past sixty years, among them the works of John W. Draper, whose *History*

*of the Intellectual Development of Europe* has been translated into a score of languages. There are also scientific apparatus invented by the professors, with charts and papers illustrating their methods of teaching and examination. Of special interest is a photographic portrait of Draper's sister, taken by the historian



BRYN MAWR SCHOOL EXHIBIT



UNIVERSITY OF CITY OF NEW YORK





GRAND BASIN FROM ADMINISTRATION TOWER





POPE LEO

cannot be purchased for gems or gold. In this allusion to university and college displays, the term is here applied to such institutions proper; for in the United States the word college is of wide application, and in these booths is a vast range of illustrations, from theses in Latin and Greek to plates showing the relative values of lucerne and oaten hay.

In connection with these exhibits may be mentioned that of the College fraternity, whose site in the north-west corner of the gallery is marked by a reproduction of the Choragic monument of Lysicrates. The side walls of the pavilion are in imitation of ebony, with gilt ornamentation; and here are the badges characteristic of the so-called Greek letter societies. In bookcases is contained the literature of the fraternity, in the form of bound volumes, magazines, and college annals, and under the clear-story window included in their space are portraits of their prominent men, with charters, symbols, and historic documents.

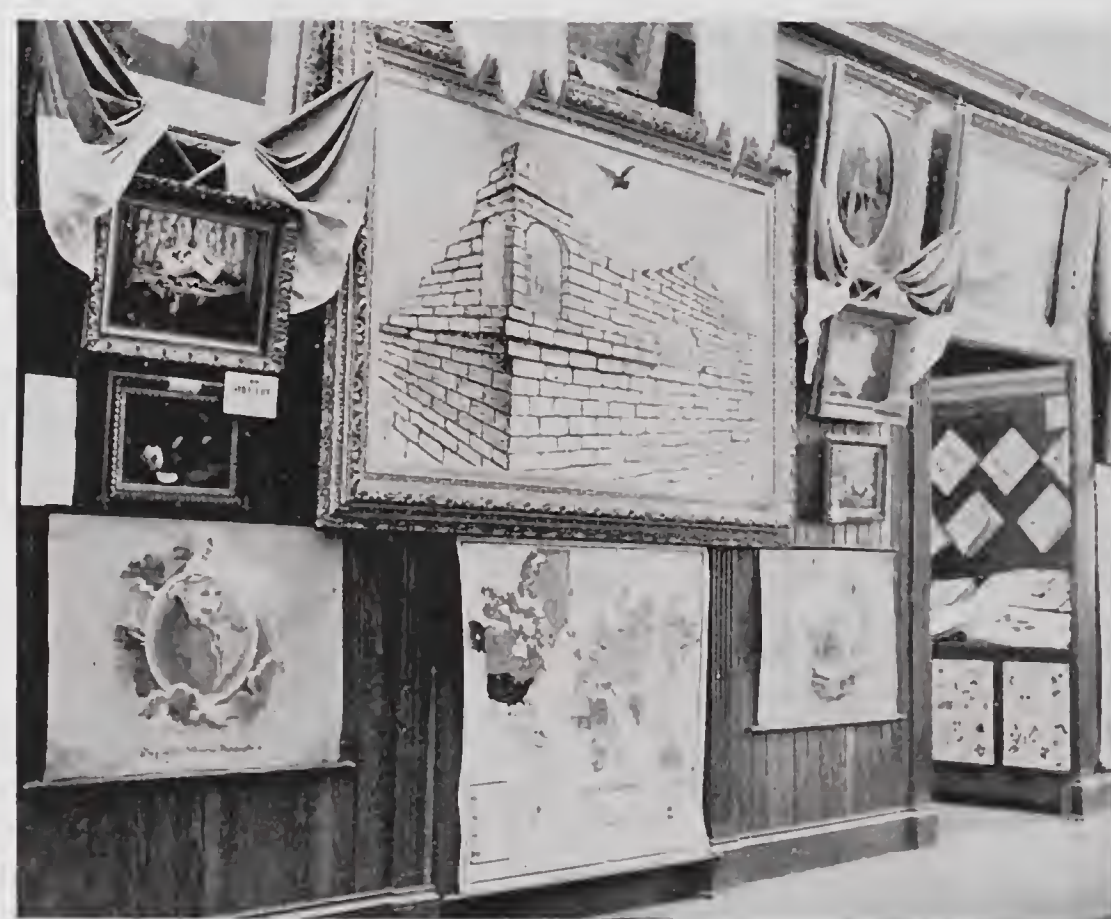


EXHIBIT OF MILWAUKEE DIOCESE

in person, presented to Sir John Herschel, and recently found among the posthumous papers of the great astronomer. This is probably one of the oldest of existing photographs of the human face. Another curiosity is the original battery used by Samuel Morse, fashioned in the room now occupied by the junior class of the University law school. On the label of the case which contains it is the following extract from an address delivered by Morse at a meeting of the alumni in 1853: "Your Philomathean hall—the room I occupied—that room in the university was the birthplace of the recording telegraph."

To the Massachusetts section many cities and towns have contributed, forming a complete illustration of her educational methods and results. As in the New York and other sections, the public-school exhibits lead up to and are connected with those of higher institutions of learning, at the head of which is the university; for such is the system generally adopted by exhibiting states. Of the elaborate collections of Harvard, Yale, Princeton, and other universities and colleges, grouped as many of them are in proximity, it is unnecessary here to make other than passing mention. They include among their exhibits, pictures, diagrams, and models of their buildings and grounds, their museums, libraries, laboratories, and assembly-halls, with college and other publications, and with portraits of professors and alumni who have won for themselves distinction and repute. There are also manuscripts, missals, charters, and other documents in the original or in fac-simile, with relics and curios that

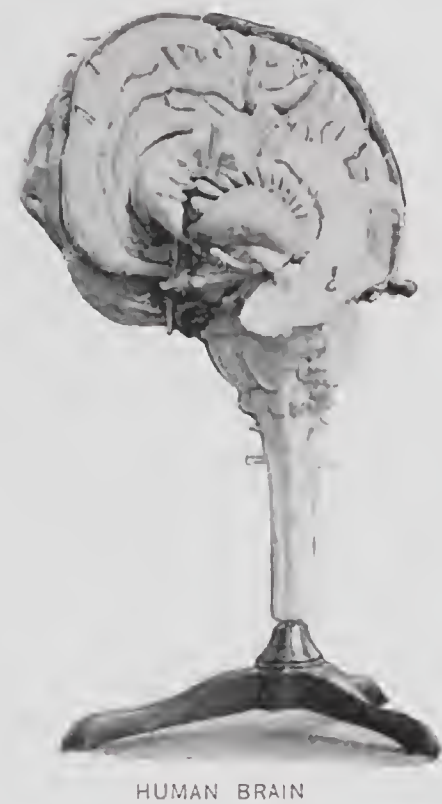


CATHOLIC HEADQUARTERS

Near the Massachusetts section, and extending thence westward along the southern aisle, are the groups of other New England states, each with a characteristic display. A feature in their collections, and especially in the Connecticut section, is the sewing work represented in articles of attire or domestic use, most of it the handiwork of girls under twelve years of age. Except for New York, Pennsylvania has the largest collection among the middle states, and one of excellent quality, for her educational system is on a par with her material greatness, as is attested by the superior workmanship and finish of her specimens. New Jersey has a compact and skillfully combined exhibit, with many original and suggestive features.

Ohio is mainly represented in the separate exhibits of three of her principal cities, Cincinnati, Cleveland, and Toledo, these being the only instances in which city schools occupy a prominent place. Missouri, with her ample school fund, has a good display of educational work, with a chart showing the location of her





HUMAN BRAIN

school-houses, and filled with statistical and other information. In Louisiana's exhibit is fully illustrated the progress of the southern states, New Orleans contributing the bulk of the collection. Minnesota's section is arranged with a view to artistic effect, and of special interest are the specimens from the manual training schools of Minneapolis, Duluth, and Stillwater, and those of children's sewing which St Paul and Minneapolis have furnished. In the booths of Iowa are maps, drawings, photographs, statistics, and other collections in which are portrayed all the branches of her educational system. Colorado, though one of the youngest of the states, has furnished sufficient evidence that she is one of the most progressive in educational, as in other matters. In addition to numerous articles of school-work, the artistic qualities of her school architecture is shown in photographs, and there are models of the first school-house and the new

high-school building completed in 1892 at Colorado springs. California and Oregon are strongly represented, the former by an elaborate and the latter by a compact exhibit of school and college

As to other participating already been said will serve to of their display. There remains, largest of all the educational exhibit, occupying 29,000 square gallery. To gather and classify three years' task, and as the attractive features in the de-attractive to all classes of vis-ect. In no sense of the word tion; nor is it in the nature of so far as it represents the education of its people, forming the church has done and is tion. In a word it is what it school and college exhibit under

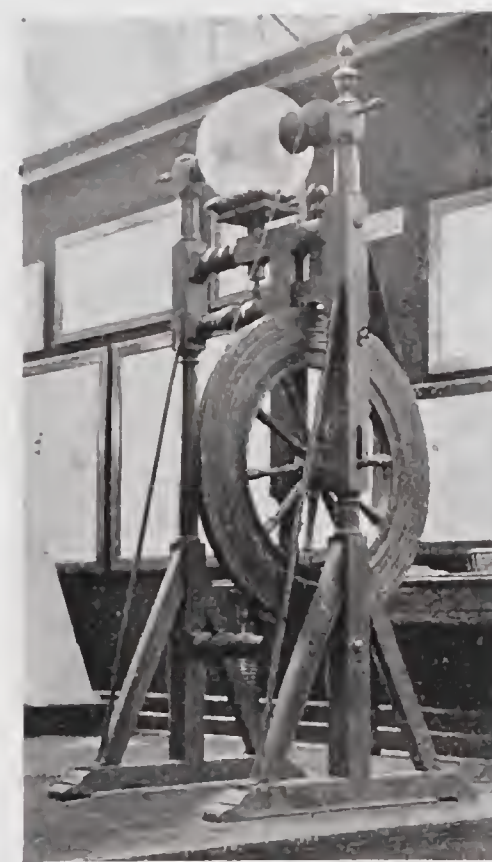
At a meeting held in which time, it will be remem-assume tangible shape, the States, with Cardinal Gibbons vitation to the principals of all to aid in preparing and organ-liminary arrangements were Bishop Spaulding accepting the Maurelian the office of secre-mission. Then quietly and

with such good will that in the completed collection are represented nearly all their educational establishments throughout the republic, with many beyond the seas. In addition to the exhibits of parish schools, academies, colleges, and universities, are those of normal schools, of schools of science and technology, of commercial, industrial, and manual training schools, of schools for negroes and Indians, of kindergartens and orphanages, and of benevolent and reformatory institutes.

Almost in the centre of the group is a statue of Archbishop Feehan, carved in Carrara marble, and of chaste and elegant design. This was presented by the priests of the diocese of Chicago, and on the pedestal is inscribed beneath his name the simple legend: "The Protector of our Schools." Around it are arranged in booths the exhibits of the various dioceses of which nearly all the principal schools are represented. The collections include every



NORWAY SNOW SHOES



BENJ. FRANKLIN'S ELECTRIC MACHINE



EDUCATIONAL EXHIBIT, NORWAY

systems, appliances, and results, states and territories, what has indicate the general character however, to be described, the groups, that of the catholic feet in the eastern aisle of the this collection was almost a result we have one of the most partment of Liberal Arts; itors, whatever their creed or is this a sectarian demonstra-a religious propaganda, except influence of the church on the a material exposition of what doing for the cause of educa-pretends to be, and that is a catholic auspices.

Boston in July, 1890, about bered, the Exposition began to archbishops of the United at their head, extended an in-catholic institutions of learning izing the exhibits. The pre-made in Chicago and St Louis, presidency, and Brother tary and manager of the com-steadily they went to work, and



GERMAN SECTION





BUST WILLIAM II, GERMANY

description and grade of educational work ; but with no distinctive classification of the various grades, as in those of the public schools. Of parish schools several hundred are here represented, the dioceses of Chicago, Philadelphia, and Buffalo having the largest number. Add to these the exhibits of higher institutions of learning, and of industrial, charitable, and reformatory institutes, and some idea may be formed as to the magnitude of the display, representing, as it does, the aggregate results accomplished by all the numerous orders of priesthood and sisterhood, to whose care are intrusted the educational interests of catholic America.

Among the more interesting exhibits is the display of industrial work, not arranged, as elsewhere, in separate groups, but in the booths of the several dioceses, where side by side are specimens from schools of technology, orphan asylums, and reformatory schools ; for in these classes of work the church makes no distinction. In certain of the booths, however, there are special displays, as in that of the St Nicholas reform school at Paris, where are musical instruments, tapestries, laces and draperies, silver-plated ware, and decorative articles in bronze and copper, all these and others the handiwork of the



EDUCATIONAL EXHIBIT, GERMANY

pupils. Several booths are filled with samples from a New York orphanage, including, among others, wood-carvings, mechanical drawings, metal-work, and brush and rope making. And so with the diocesan collections, for in most of the dioceses are similar asylums, and one or more industrial and manual-training schools.

Of school and college buildings, with their chapels, classrooms, lecture-halls, libraries, and grounds, there are many drawings, paintings, and photographs. In graphic art are also represented groups of students and teachers, of music and sewing classes, and the workshops of training and industrial schools. Of paintings on porcelain, of free-hand crayons, mechanical and perspective drawings, and drawings from nature, there is a large collection, together with maps and hypometric models of cities and countries. Printing and type-writing, plain and ornamental, electrotyping, carpentry, shoe making, tailoring, needle-work, wax-work, as well as other useful arts and industries, are represented in the catholic exhibit.

Elsewhere in the educational section are the special exhibits of industrial and training schools, art and medical schools, business colleges, asylums, and other institutions not connected with the catholic church. Among the training schools represented are those of Chicago, St Louis, Cincinnati, Baltimore, and Toledo, the Carlisle Indian school, and the Hampton Normal and Agricultural institute for Indians and negroes, the two last pleading in silent eloquence for these wards of the republic. Worthily of note are the leather manufactures in the form of harness, satchels, trunks, and shoes, and the carved and inlaid wood and cabinet work.

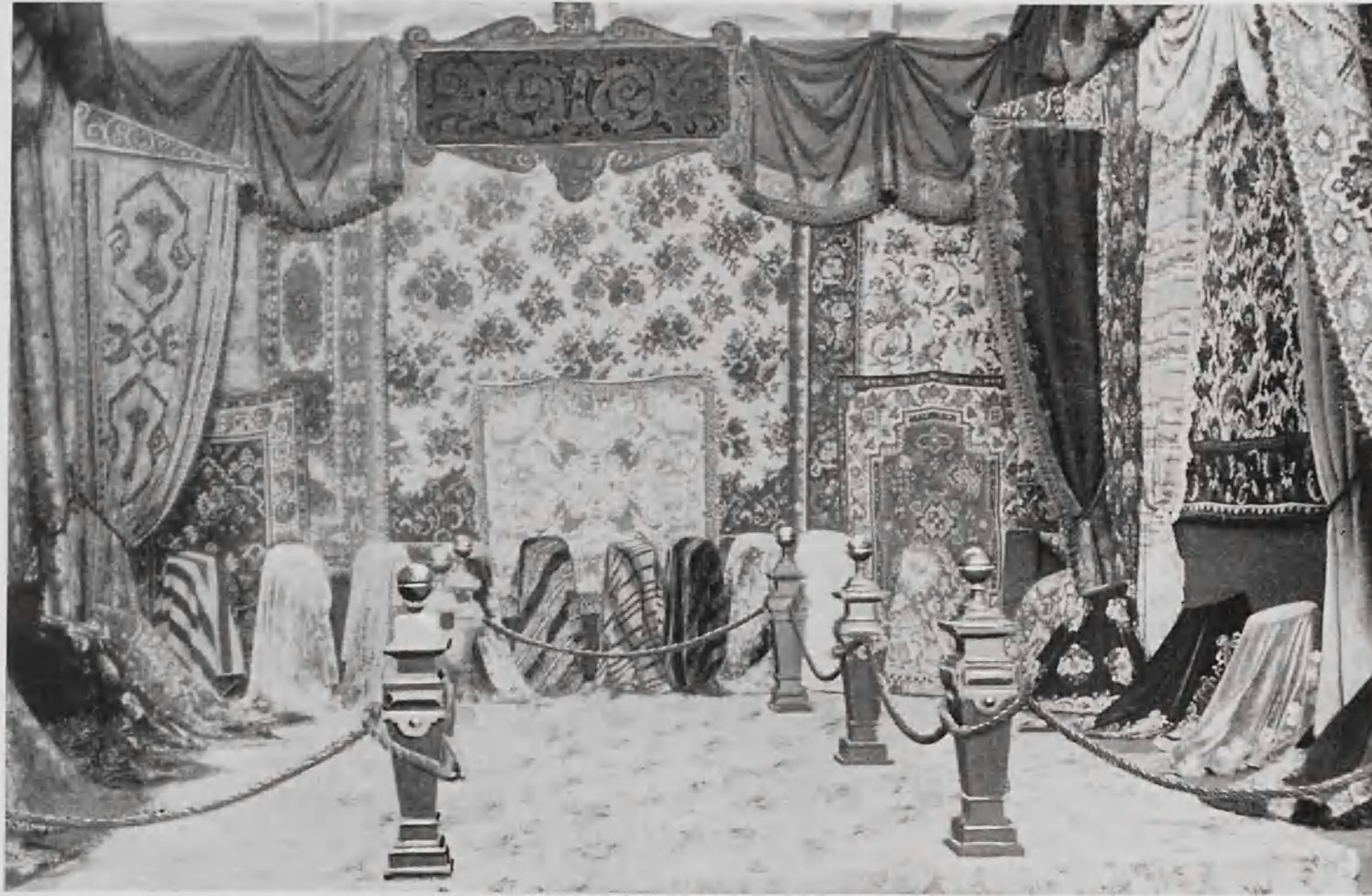


GERMAN KINDERGARTEN



VOLODYMYR VERKHOVYNSKY





CARPETS AND RUGS, GERMANY



STAINED GLASS

The groups representing asylums for the deaf, dumb, blind, and feeble-minded form an elaborate display, and one in which are fully illustrated the most humane and intelligent methods of treatment and training. Manual work of a rough description the visitor would probably expect to find among the exhibits of schools for the blind; but to see there printed publications, free-hand drawings, and the finest of crochet work is somewhat of a surprise. A Washington institute for the deaf has contributed a replica of the monument erected at the national capital in honor of Gallaudet the elder, by whom was founded in Philadelphia the first American institute for deaf-mutes. Even from insane asylums are specimens of useful workmanship, for in such are not a few possessed of the rational faculty in greater degree than many outside their walls.

Among the art institutes represented in this department are those of Chicago and St Louis, the Cooper union, the Boston museum and the New York art students' league, while Pennsylvania has also collections from her museum, her academy of arts, and her Philadelphia school of design. In all these exhibits are illustrated by specimens the several courses in drawing and designing, together with systems of instruction, and their results in the competitive display of classes and pupils. In the medical section are the exhibits of eclectic, homœopathic, pharmaceutic, and other colleges.



ALTAR, GERMANY



ALTAR, GERMANY



The principal business colleges of the United States, apart from those under catholic auspices, have a collective display in the western gallery, with specimens of penmanship, stenography, and telegraphy, together with a class-room in actual operation, showing the workings of such institutions. Finally in the exhibits of Wellesley, Mount Holyoke, and other colleges and seminaries, together with those of several art schools, is represented the education of women.

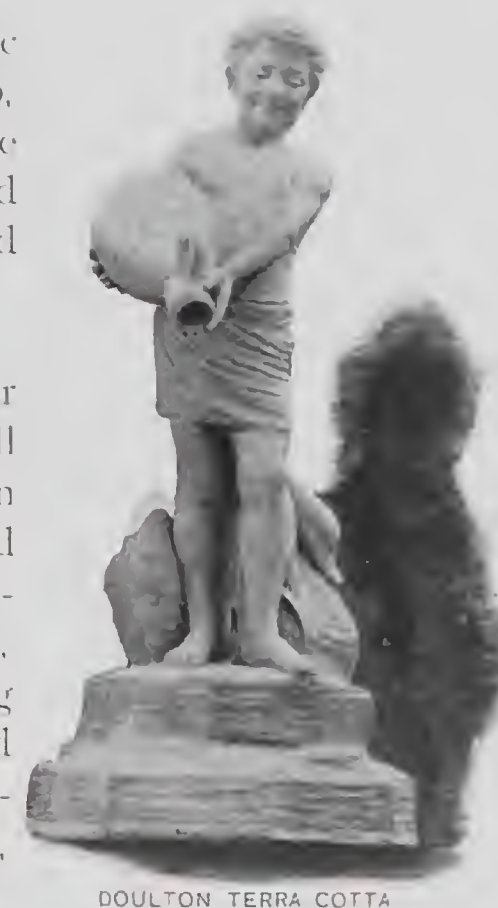
Among foreign powers Germany has the largest of the educational exhibits, in her 22,000 square feet of space in the western gallery. And here in truth is a display well worthy of a country famed for her thorough and scientific system of education, one in which the student may read that system almost as thoroughly as though he had travelled thousands of miles to study it. In this collection is a complete and explicit demonstration of the methods employed in the various grades, with plans, illustrations, statistics, and such other data as may render those methods intelligible. There are maps showing the location of all the higher institutions of learning, with paintings, photographs, and models of German schools, and ical charts, some of them 400 side by side with those of mod-

The educational exhibits classed in three divisions, in ing to public, normal, and high grades, to asylums, and to the these collections are specimens prepared for the purpose, but of what is being accomplished ments, including the manual school section are represented teaching methods, especially occupy an important place in also the annual reports of all ing, including those for 1892, oldest and most celebrated

But the most interest- of the universities, twenty in one-half of the space allotted in part of a special character, leading educational features, interest. First of all are large buildings, with elaborate plans the walls are portraits of emi- science, among them one of Alexander von Humboldt, of Kekule, and August Wilhelm Hofmann, from the royal library and national gallery of Berlin. Of autographs and autographic letters there is a choice collection, including those of Charlemagne, Louis the German, Karl I, Goethe, Schiller, Kant, Winkelman, and a despatch to the great ex-chancellor from Wilhelm I. On a fac-simile of a page in the church register at Bonn

is recorded the birthday of Beethoven; all these and other treasures from university and state libraries, which have contributed, in 3,000 handsomely bound volumes, the best works of German scientists, inventors, and discoverers, with all the leading scientific periodicals.

Together with models of ancient and modern laboratories and apparatus for scientific investigations are reproduced many of the principal inventions and appliances, including the telegraphic instrument fashioned by Gauss and Weber, in which is embodied Faraday's system of insulation, and the apparatus with which Kirchoff and Bunsen developed their method of spectrum analysis. There is also the first mirror which



DOULTON TERRA COTTA



ENGLISH CHINA



TERRA COTTA, BRITISH SECTION





PALACE OF MANUFACTURES AND LIBERAL ARTS



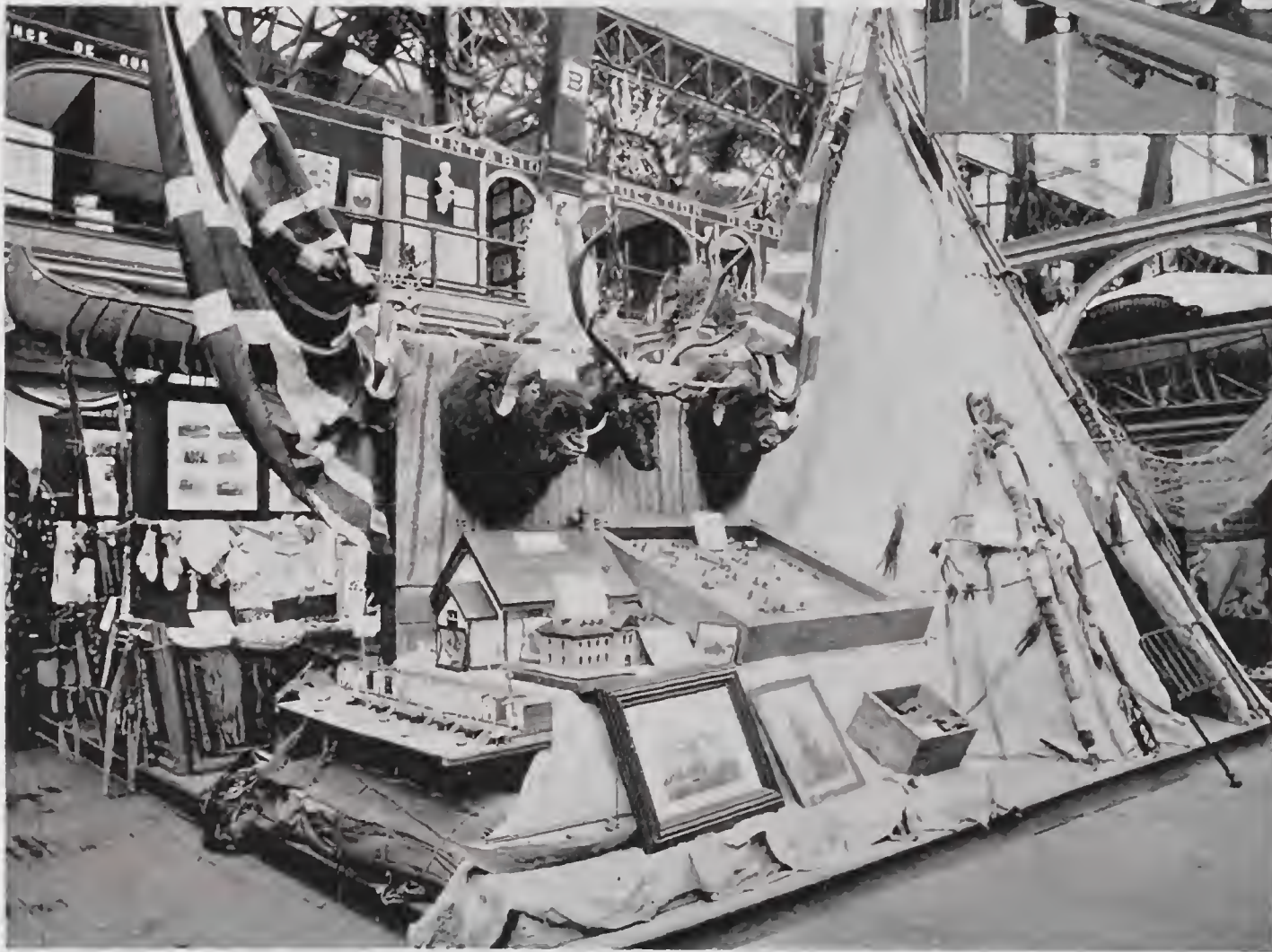


CANADIAN SECTION

tion; in another is reproduced an operating and dissecting room, and a third consists of a food collection for army and other purposes where concentrated nourishment must be produced at the smallest cost. But of all the special exhibits, perhaps the most interesting is that of bacteriological specimens and apparatus by Robert Koch, with bacilli of all known varieties stored in glass cases, and the instruments with which



EDUCATIONAL EXHIBIT, NEW SOUTH WALES



CANADIAN INDIAN SCHOOLS

Helmholtz constructed, and the air-pump which Otto von Guericke invented in 1650. A Guesfeld outfit includes all that is usually needed for scientific and exploring expeditions, and in botanical tables and charts is illustrated the mode of introducing and propagating exotic plants.

Of chemical specimens, small in size but large in number, there is a valuable assortment, mainly from the German chemical society, and so with mineralogy, zoölogy, and other natural sciences, most of which are here represented; but for the speculative sciences there is no place in the German section. A special exhibit by Rudolph Virchow, one of the foremost of pathologists, is in the form of a lecture hall, specially equipped for his purpose, and with a large anatomical collec-

they are detected and placed under the light of the microscope.

In connection with the German section may also be mentioned the display of scientific instruments by more than forty manufacturers, fully sustaining the high repute of German craftsmen in this direction. Among them are lenses of all descriptions and sizes, and in every stage of manufacture, from the rough pebble or glass to the finished article, with photographs from such as are used in that art, as nearly perfect as photographs can be. For these and for optical and surveying instruments, both of which are here represented, there is



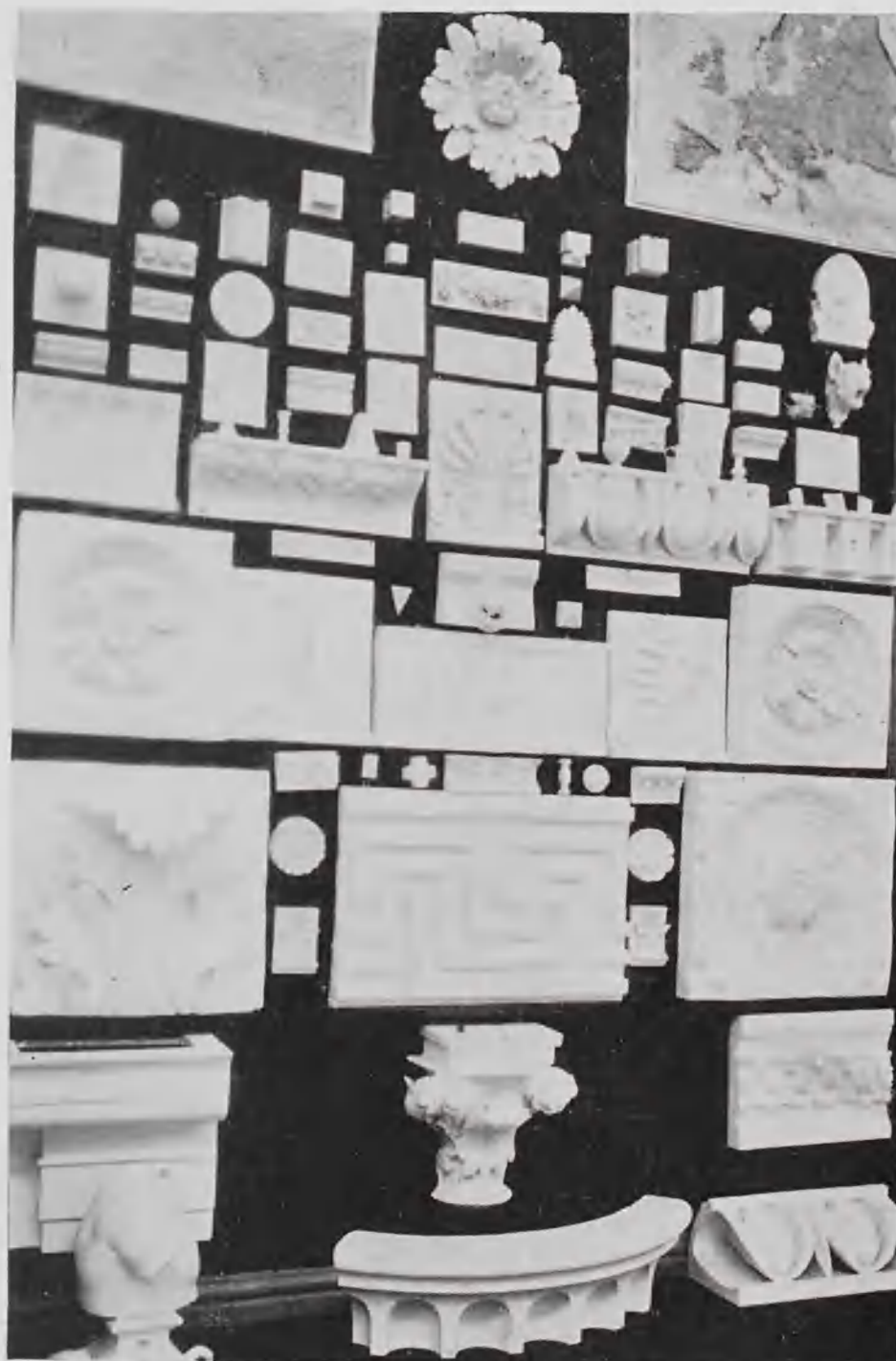


STAINED WINDOW

the phrase public school is applied to Eton, Harrow, Rugby, and other endowed institutions, some of them founded in the fourteenth, and not a few in the fifteenth and sixteenth centuries. These and others established by religious denominations or through private benefactions,

were, apart from her universities and private schools, about all that England had to show in the way of education.

In the exhibits of the London school board are specimens of writing, map-drawing, designing, modelling, wood, iron, brass, needle, and kindergarten work, with school-books, materials, apparatus, models, and diagrams.



DRAWING MODELS, FRENCH SECTION

a large and increasing foreign demand. The astronomical instruments are of superior finish and precision, with ingenious methods for minimizing the effect of errors in construction.

Somewhat in contrast with Germany's elaborate display is England's exhibit, in which there is less to interest, less even than in those of her dependencies of Canada and New South Wales. This calls to mind the fact that England was among the last of the great powers to accept, as a nation, the responsibility of providing methods and means for public education. It was not until recent years that the evolution of her public school system was fairly commenced, and even yet she has no such coherent and comprehensive system as those of Germany and the United States. In the mother country



FRENCH SECTION



RENOMMEE PAR INGALBERT

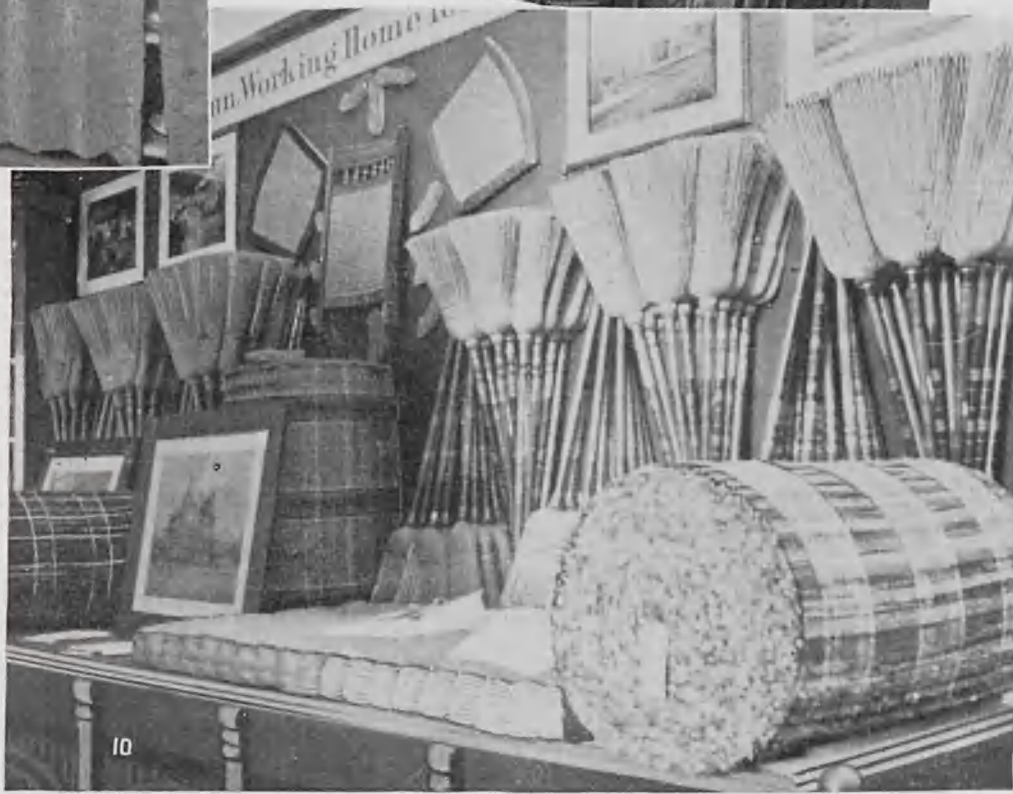


STAINED WINDOW

Dublin, has a collection of anatomical models, and from schools of art are some of the drawings, paintings, models, and designs executed by their pupils.

In this connection may be mentioned the elaborate collection of photographs, adjacent to the educational display, in which are represented most of the prominent photographers of





1 SCHOOL FOR THE DEAF, MICHIGAN EXHIBIT. 2 VASSAR COLLEGE, N. Y. 3 SECTION OF PRIVATE SCHOOLS, NEW YORK.  
4 PENNSYLVANIA SCHOOL OF INDUSTRIAL ART, WOOD CARVING. 5 SCHOOL FOR THE DEAF, JAPAN EXHIBIT.  
6 BERLIN UNIVERSITY OF ANATOMY, GERMAN EXHIBIT. 7 GERMAN AND ENGLISH ACADEMY, MILWAUKEE, WIS. 8 SECTION OF GERMAN EXHIBIT, DR KOCH.  
9 PENNSYLVANIA MUSEUM AND SCHOOL OF INDUSTRIAL ART AND WOOD CARVING. 10 PENNSYLVANIA WORKING HOME FOR THE BLIND.



Great Britain. There are also engravings, etchings, and photogravures from art societies and art publishing firms and associations. Elsewhere in this section are specimens of book-binding, and an assortment of newspapers illustrating the development and characteristics of British journalism.

Canada is represented by the educational exhibits of the provinces of Quebec and Ontario, housed in cheerful and tastefully furnished booths. Here are contributions from some 200 of the principal schools, most of them under catholic auspices, and including all branches of education, from primary to high-school grades and special courses. Class-room work is freely distributed, with samples skilfully arranged, and displaying the aptitude and proficiency of the pupils. Of excellent

quality are the relief-maps, the specimens of ornamental drawing and penmanship, and the embroidery and other needle-work, the last from the institutions of the sisters of Notre Dame. Elsewhere in this section, and of similar character, are the collections of secular schools and colleges, with representations of the educational systems of the northwest provinces. In galleries of photographs are depicted scenes in the Rocky mountains, in Nova Scotia, and on the banks of the St Lawrence, together with the public buildings of Ottawa. Of musical instruments there is a small assortment, and the Scotch element finds expression in a display of curling stones of Toronto manufacture.

In the narrow space allotted to New South Wales are several hundred photographs in the highest style of art, portraying the history of Sydney, almost from the day when the British flag was unfurled on the shores of Port Jackson amid a group of naked, gibbering savages. Among them is one of the largest photographs in existence, reproducing the harbor of Sydney, one of the most beautiful in the



PEDAGOGIC MUSEUM, RUSSIA

world, and the largest on the southern continent except for Hobson's bay where Melbourne sits enthroned, and in the centre of which its shores appear in faintest outline, even under the bright Australian sky. In other photographs are depicted the public buildings and statuary of the metropolis, her parks and pleasure grounds, with the mountain and river scenery, the forestry and agriculture of a colony almost equal in area to the entire Pacific coast. There are also collections of water colors, one representing the animals, another the birds indigenous to the country, and supporting the Australian coat-of-arms, over the entrance to the pavilion, are the

largest kangaroo and the largest emu that could be secured and stuffed for the purpose. Of natural specimens there is a choice assortment, including birds of brilliant plumage, and the web-footed ornithorhyncus, or platypus, with the bill of a duck, the eyes of a fish, and the fur of a seal. The Technological museum has a display of classified wools, and many varieties of timber and plants of economic value. For journalism a corner is reserved, while educational exhibits in the stricter sense of the term are restricted to those of the public schools, and



TRANSPORTING MAIL IN SIBERIA BY DOGS

to specimens of work from the deaf and dumb institute under government auspices.

The exhibits of France in the eastern aisle of the gallery consist largely of samples of work from her polytechnic and training schools, both of which are prominent features in the educational system of this country. The public schools are also represented, as are the commercial and night schools. All the exhibits are grouped



TYPES OF RUSSIAN RACES



RUSSIAN TRANSPORT OF MAIL BY MEN IN CAUCASUS





BELGIUM



SWISS WOOD CARVING

with the true artistic taste of the Frenchman, forming, as a whole, a complete illustration of school life, with exercises and examinations, and with text-books arranged in regular order and adapted to every grade, from the primary school to the university.

But the most interesting feature in this section is a representation of the library systems of France, together with her stationers', book-sellers', and bookbinders' trades. Among rare and valuable works is De Lamennais' *Imitation de Jesus Christ*, its 102 quarto pages all decorated in different designs, with four large pictures from manuscripts of the thirteenth to the sixteenth centuries, and with ciselure work such as is found in the illuminated manuscripts of bygone ages. A priceless treasure is the

*Heures*, belonging to the first quarter of the thirteenth century, in small octavo on vellum, with French and Latin characters, and miniatures painted on gold ground in relief, all in the purest of classic style. Other curiosities are a reproduction in old morocco of Madame de Pompadour's writing-case, with flowers in mosaic; a prayer-book with borders, miniatures, and Gothic letters executed in silk; a *Livre de Mariage*, with bas-relief in carved ivory, and a card-case representing the finest cuir-ciselé work of the renaissance. Still another rare work describes the triumphant entry of Charles IX into his capital, and in *Ces Prêsentés Heures*, Paris, 1498, is a miniature figure of an angel, copied from the prayer-book of Anne of Brittany.

Under the auspices of the Cercle de la Librairie, founded in 1847 on the eve of the revolution, and including more than 400 members, a catalogue was specially prepared for the occasion, containing much that is of interest. Here may be read the history

of the more famous printing and publishing houses, one of them founded in the seventeenth and several in the eighteenth century; for in France a business, once fairly established is often preserved in the family for several generations. Sixty of the members of this association are represented in the French section, and among their exhibits are many choice works, especially in *ouvrages de luxe*. Of these may be mentioned *Les Maîtres Florentins de XV<sup>e</sup> Siècle*, with illustrations from original paintings and sculptures in the Thiers collection; the first of two folio volumes by Edouard Rouveyre, relating to the manuscripts of Leonardo de Vinci, with copies of the originals; Charles Blanc's *Histoire des Peintres*, and Le Vasseur's editions of Buffon and La Fontaine. Other editions de luxe are from a publishing house in Tours, whose establishment covers six acres in the heart of the city, and from which are issued several millions of volumes a year. Other publications



ANCIENT MEXICAN CARVING



BELGIUM



worthy of note are illustrated editions of Victor Hugo's works, one in forty-eight and another in seventy volumes, and those of Sir Walter Scott in thirty volumes, of which only twelve are on exhibition, with illustrations by the foremost of French artists, costing or to cost, when completed some twenty years hence, the sum of \$150,000.

Russia has much to show in her 1,000 square feet of gallery space, largely occupied by specimens from hundreds of orphan and other asylums with their hundreds of thousands of inmates. Among their specimens

of needle-work is a beautiful piece of embroidery representing the arrival at Russian ports of American ves-



JAPAN

sels laden with grain. This is the handiwork of St Petersburg school-girls from twelve to fourteen years of age, and at the close of the Fair is to be presented, as a token of gratitude, to the wife of President Cleveland, while for the president himself was fashioned a mantel ornament in gold and silver thread, interwoven on a background of dark red silk. From national and private schools and other educational and charitable institutions are many collections, and especially from those under imperial patronage. In addition to samples of work are models, charts, statistics, and illustrations pertaining to matters educational throughout the broad realm of the czar. These, together with everything else contained in

the department of Liberal Arts, except for a few articles of special value, are to be distributed among the benevolent and other institutes of the United States.

Among the exhibits grouped in this section is that of the postal service, with life-sized figures of officials, and with mail-pouches littering the tables and floor as though cast aside by the carriers.

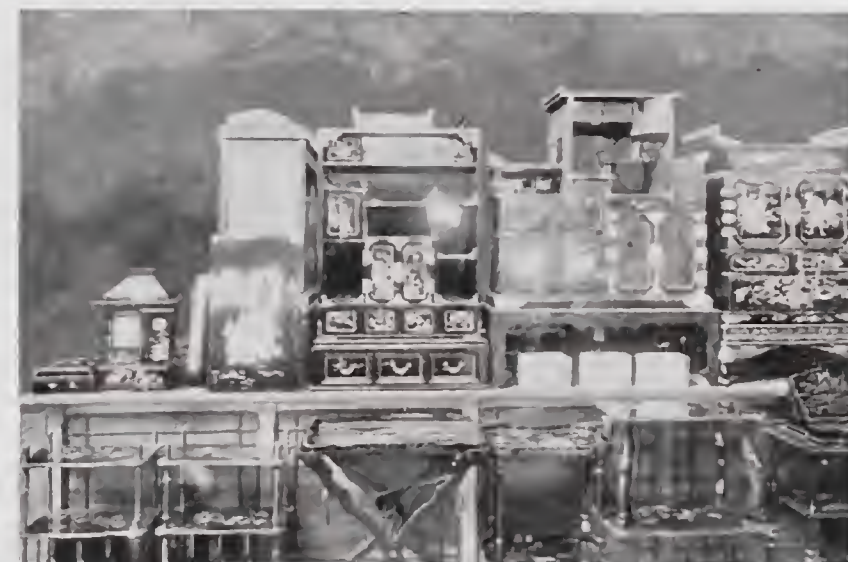
The carriers themselves are represented in realistic fashion by models and pictures, one travelling over the snow in a reindeer sledge, another in a cumbersome horse cart, and a third mounted on a camel, with others toiling afoot through rugged mountain passes, the entire group being intended to illustrate the difficulties connected with the service and the means by which they are overcome throughout the broad realm of the Russias, covering as it does one-sixth of the land surface of the globe. The War department, in its several divisions, has also a liberal display, including plans of the military prison at St Petersburg, and of the corn granaries erected near Warsaw to be used as storehouses in case of siege. Then there are the uniforms and musical instruments of the various army corps, and books relating to the science of fortification and other branches of warfare. In charts are indicated the proportion of food elements in the daily ration of pupils of the military schools, and the stature of Moscow school children. The Pedagogic museum has models of the many ethnological types of which the population of the empire is composed,



PAINTED STATUE, JAPAN



HARDWARE AND PICTURES



JAPANESE FURNITURE





TERRA COTTA, DENMARK



AUSTRIAN GLASS



ITALIAN SECTION



CHINA WARE AND LANTERNS, JAPAN



BEEF EXTRACT

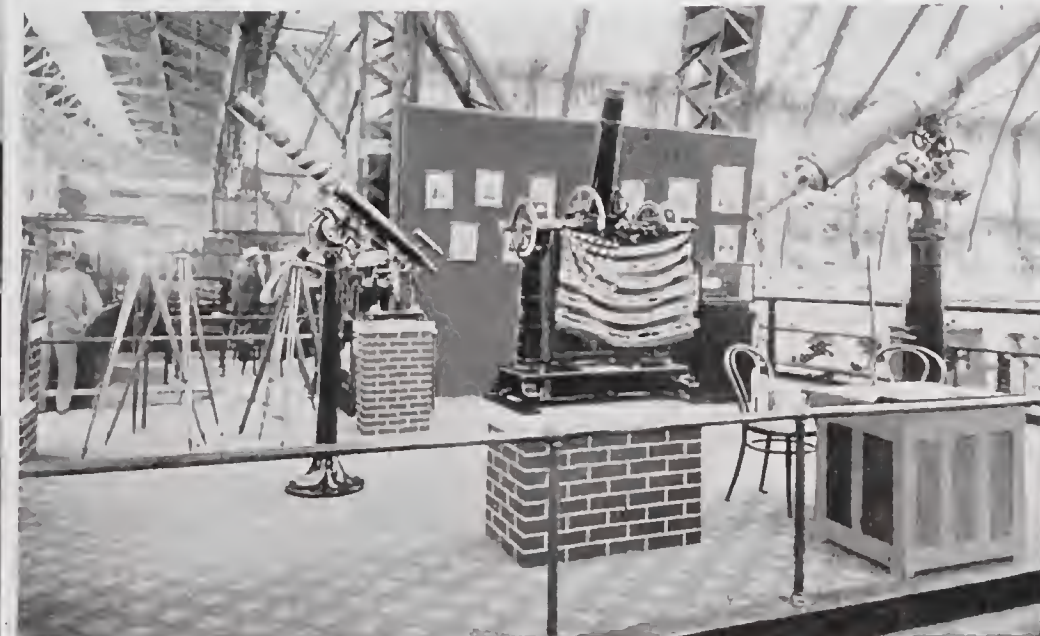




ITALIAN SECTION

with cabinets filled with minerals, skeletons, and mounted specimens of animals and birds.

Austria has no educational exhibits, except for the models, school apparatus, and musical



TELESCOPE EXHIBIT

instruments, displayed by business firms. Italy has only a few educational publications and reports, and Belgium, a few plans and designs for school-houses, with a model of a school for basket-making, also from private firms. Denmark is represented by models, drawings, and implements from a Copenhagen society for encouraging



FIRST SUNLIGHT PHOTOGRAPH

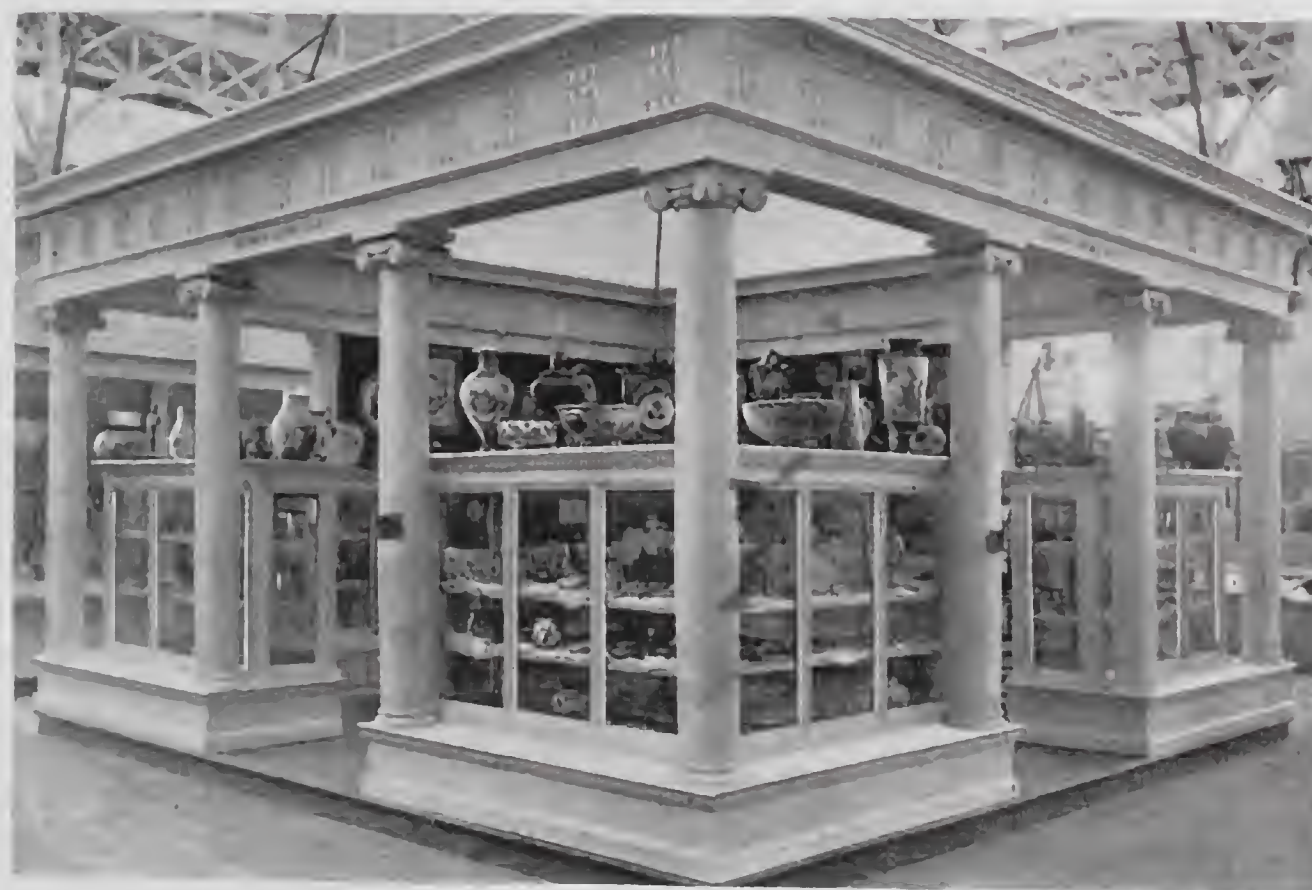
manual labor in homes and schools, and by a method of teaching drawing to feeble-minded children. In Mexico's section, where are large transparencies of President and Mrs.



SILVERWARE

Diaz, are fully illustrated the improvements in her school system during the present régime. Here also is an assortment of musical instruments, and a museum stocked with the birds and animals native to our sister republic. Japan has a large and exhaustive collection, one fully explaining the organization of her public schools as developed within recent years, largely on the American plan, and with the aid of American teachers. All the workings of that system are here on exposition, from the kindergarten and primary grades to the high school and the imperial university. There are also colleges of art, engineering, technology, and agriculture, with commercial schools, and schools for the blind and mute. From many of these

are specimens of work and apparatus, with diagrams or models of buildings, records, reports, regulations, and statistics. From the pupils of the government schools are many samples of needle-work; pen-drawings, crayons, and colored sketches; artificial fruits and flowers; native woods and



CHICAGO CERAMIC DISPLAY



FIRST PHOTOGRAPH OF THE MOON





THE LARGEST TELESCOPE IN THE WORLD



models in wood of buildings and bridges; decorated porcelains and other ceramic ware, and an entomological cabinet illustrating the insect life of Japan.

Considered as one comprehensive display of what has and is being accomplished the world over in the cause of education, we have in these sections by far the most complete and interesting collection that has ever been gathered together. Here may be compared the systems of countries many thousands of miles apart, the systems developed under autocratic and republican rule, denominational systems with those of the state, all grouped within a few thousand square yards of space, and yet presenting a clearer illustration of methods, appliances, and results than could be obtained from an extended tour of the world. While the entire Exposition is of itself in the nature of an educational display, the strongest factors in that display are the groups which reproduce in miniature what the world has to show us in the art of teaching—an art, indeed, it may properly be termed, for the true pedagogue, like the poet, is born, not made.



AMERICAN TRACT SOCIETY

In the central section of the northern gallery is illustrated the entire domain of photography, with the reproduction of photographs and works of art, forming a collection which goes far to prove the oft repeated statement that no branch of art or science is becoming so rapidly perfected and popularized. Here are chambers filled with the most finished specimens of albertypes, aristotypes, steel engravings, wood-cuts, photo-engravings, half-tones, and wash drawings, from the large clear photograph of a locomotive at full speed, caught by the instantaneous process, to the most delicate gems of workmanship.

Except to the specialist, the display of surveying and engineering instruments, and of meteorological, optical, and astronomical apparatus is of no great interest; but in this connection is the most striking exhibit in all the department of Liberal Arts, in the form of an equatorial telescope, sixty-five feet in length, with a lens forty inches in diameter, and weighing, apart from its foundations, nearly seventy tons. In weight it is about fifty per cent and in power twenty-five per cent greater than the Lick telescope at the Mount Hamilton observatory, the gift of a California millionaire to the cause of astronomical science.



HARPER AND BROTHERS



DESIGNS IN STAINED GLASS WINDOW





NUBIAN GIRL



POTTERY EXHIBIT, AUSTRIAN SECTION

and with this exception the largest in the world. Yet so delicate is the workmanship and so perfectly balanced the parts, that the tube and declination axis to which it is attached, weighing together 16,000 pounds, can be moved by the pressure of a forefinger. Built by the artificers of the Lick instrument for a wealthy and public-spirited citizen of Chicago, the Yerkes telescope, located near the northern end of Columbia avenue, will find a permanent home in the Geneva observatory in connection with the university of Chicago.

Beyond the galleries of photographs, engravings, and exhibits relating to the reproduction of color or form, are the collections of United States publishers, some of them so arranged as to display not only mechanical processes, but the original sketches of artists and manuscripts of authors whose works have won for them repute. Here one may read somewhat of the history of several of the great publishing houses of the United States. Thus in the pavilion of Harper and

brothers is the first book published by that firm in 1817, a translation of *Seneca's Morals*, a worn and dust-brown volume, by the side of which is a recent edition of *She Stoops to Conquer*, illustrated by Edwin A. Abbey, and the original manuscript of *Ben-Hur*.

More pictures than books are exhibited by the Century company, and of special interest is its case of Lincoln relics, including his letter accepting the nomination for the presidency, the original draft of his proclamation of 1861, calling for 75,000 troops, the proof sheets of his inaugural address, with corrections and interpolations in his own handwriting, and his message to congress in 1865, proposing compensation to slaveholders, together with portions of his correspondence with Douglas, Grant, and Jefferson Davis. In this collection is the only letter which Jefferson Davis addressed to Lincoln in his official capacity as president of the Confederate States of America. There are also casts of Lincoln's hands, and a life mask of his features, the latter taken in 1860 by a Chicago artist. In the pavilion of this company is illustrated its system of wood-engraving, and its typographic methods, the latter in a case containing proof-sheets and page-forms of the dictionary. An interesting feature is an article written by Kennan, the Siberian traveller, and mutilated by the Russian censor of the press.

The Scribners have some rare first editions and many specimens of costly and

elaborate bindings, the latter contrasting somewhat sharply with the faded yellow cover of a magazine in their collection, bearing the date of 1787—the first one published in the United States. There are many manuscripts of noted authors, some written with the pen and others with the typewriter, and more expressive than any words that Stanley could have sent are two arrows, tipped with poison, representing an episode in his



SCHOOL FOR DEAF AND DUMB



THOMAS HOPKINS GALLAUDET





GLASS EXHIBIT, AUSTRIA

books, statistics, and diagrams, the workings of their systems and the growth of their orders. The American Bible society has an especially interesting collection, including such rare biblical editions as the King James of 1611; a fac-simile of the first page of the first bible ever printed, the Mazarin, of 1450; a copy of the *Biblia Pauperum*, representing the style of printing from wooden blocks, and the *Hexapla*, showing side by side the Greek text and the six early versions of the scriptures. In the pavilion of this society one may examine copies of its special publications in 300 different languages.

Of the French exhibits on the gallery floor, in the department of Liberal Arts, forming as they do an integral portion and not a mere overflow of her display, mention has already been made. The other foreign powers represented are Great Britain and her dependencies of Canada and New South Wales, Germany, Austria, Italy, Russia, Mexico, and Japan, all of them in the western section of the gallery. Italy's pavilion is in the shape of the letter T, and over its double portal, fashioned in imitation of Carrara marble, on which are painted the royal arms, are suspended the national colors. In addition to such articles as are included in her main collection are Leghorn hats, gold-embroidered satins from Palermo, and armor from Sicily, with musical instruments from Venice, literature from Rome and Milan, and horological and other scientific instruments from all the chief municipalities, among them a clock which as its maker claims

explorations of the dark continent. Houghton, Mifflin and company's pavilion is so arranged as to resemble a library, with the busts of authors appearing above their works. The Appletons' exhibit consists mainly of works of art, with a collection of reference books; by other firms juvenile literature is represented, and by a Chicago house are displayed some of the largest maps ever made, one of them printed from a single plate. In a word, every department of American literature is here represented, together with certain branches of graphic and delineative art.

Adjoining this section are exhibits which demonstrate the proselyting methods of the various religious associations. Through their publishing houses many of the churches present specimens of denominational literature, and kindred organizations explain by means of printed



ITALIAN STATUARY



JOAN OF ARC

illustrates the theory of perpetual motion.

In the exhibits of other foreign powers are illustrated their works of reproductive art, their printing processes and their improvements in surgical, medical, and scientific apparatus. The English and German picture galleries have also choice collections of photographs and engravings, loaned by art societies, with contributions from private firms and publishing houses. Japan displays, in addition to her educational exhibits already described, a number of photographs representing her modern ordnance



FRENCH BRONZE



A LA DANSE



and arsenal, with charts, tables, and other illustrations of her postal system. In the New South Wales section is revealed her progress in manufactures and in the functional departments of government, the former showing remarkable development since the days, not long gone by, when, apart from a few saw and grist-mills, a small woolen factory for the production of coarse blankets and tweeds embodied the entire manufacturing industries of a colony with more than 300,000 square miles of area.



unobstructed space equal to that of a six-story building with sixty feet of frontage.

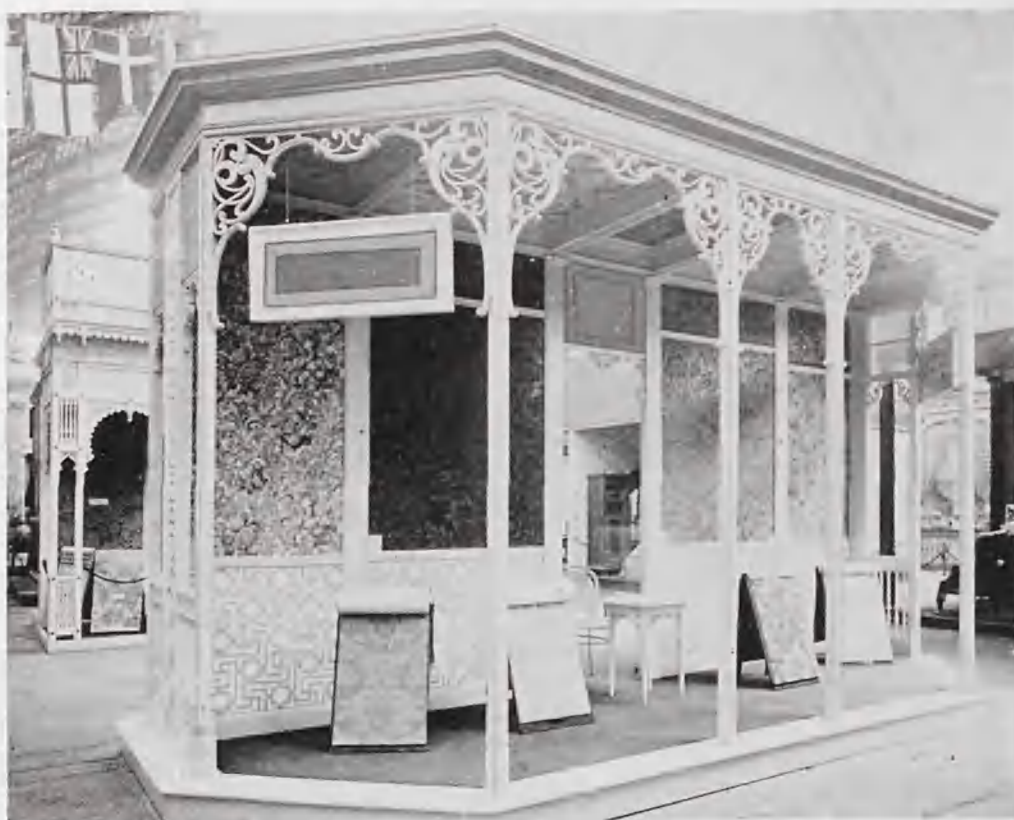
Among the Russian exhibits in the Liberal Arts section is the Tolstoi book-case of old oak of brownish hue, with panels in the form of pictures, the design of which is burned into the wood. In one of them Tolstoi is represented at work among the peasantry on his estate; in another, busied over his manuscript and books; in a

WORLD'S FAIR MISCELLANY.—The Yerkes telescope, mentioned in the text, was not placed in position until several weeks after the opening of the Fair. It was not until late in December of 1892 that the contract for making this instrument was assumed by the Cleveland firm of Warner & Swasey, and it was thought that at least a year would be required for the task, the magnitude and delicacy of which it is impossible to over-estimate. The telescope was put together at the Fair, as indeed it must be; for apart from the question of transportation, to place the tube in position on its supporting columns would have required an

Benton, in which the former cleared himself from the imputation of lukewarm patriotism, caused by his English proclivities. Finally, there is in this section a historic collection of dictionaries, including the first one published in the English language, compiled by John Bullocker, and bearing the date of 1616; the second, issued in 1623, and written by Henry Cockeram. Thomas Blount's dictionary



FRENCH SECTION, BRONZE CANDELABRA



BRITISH SECTION, WALL PAPER

of the edition of 1670; Samuel Johnson's of 1755, and the Imperial dictionary which James Ogilvie published in 1847, many of the features of which are reproduced in the Century dictionary.

Prominent among the Art school exhibits in the southern gallery is that of the Chicago Art institute which, though one of the youngest, ranks among the foremost in the United States. Its efficiency is largely due to the ability and zeal of the instructors, among whom are such men as Frank Millet and Lorado Taft. The character of its exhibits is indicated in my description of the institute, in the chapter containing a brief historic sketch of Chicago. The collection from the Art students' league of New York is also a creditable display, representing, as it does, modern ideas and methods,

third, at rest in his garden, and on a fourth is a replica of Repin's portrait of the great Russian author. The case is filled with his novels and philosophical treatises.

In the American publishers' section are some interesting manuscripts in addition to such as are mentioned in the text, and of special interest to those who love to study the chirography of prominent authors. In backhanded writing, but as plain as print, are pages from the pen of Thomas Bailey Aldrich, with the bold, dashing handwriting of Henry James, the angular, feminine handwriting of W. D. Howells, the last manuscript sheet of Frank R. Stockton's romance of *The Lady or the Tiger*, and some of the copy of Frances Hodgson Burnett's story, *Little Lord Fauntleroy*. Among other specimens are the manuscripts of Mark Twain, Bret Harte, R. H. Stoddard, and E. C. Stedman, with the letter from James Russell Lowell to Joel





modelled largely on the French schools. Objection has been taken to the exhibits of the Pennsylvania academy, on the ground that they reveal too strongly the influence of French impressionists. Boston has sent some excellent studies, and there are small collections from the Minneapolis and Jacksonville schools.

In the exhibits of the university of the city of New York is one of the first telegraphic messages that ever passed over the wires, forwarded by Samuel F. B. Morse on the 24th of January, 1838, and by him and his associates recorded in the university chapel. It reads as follows: "Attention. The universe my kingdom. Right wheel." The message was dictated by Professor Thomas S. Cummings, who afterward filled the chair of art, and on whom had just been conferred a general's commission. Hence the wording which, though it may have been sent in jest, was none the less prophetic. In this section are represented the several departments of the university,



ORNAMENTAL BRONZE CLOCK

including its school of pedagogy, established at the request of teachers for higher instruction in that science. To Mrs Benjamin Williamson, a member of that school, one of the advisory committee of the university, herself from the state of New Jersey, I am indebted for valuable information in this connection.

From the university of Philadelphia comes a collection of fragments of Babylonian pottery, bricks, tablets, and ornaments gathered during an expedition sent forth in 1888 under the auspices of that institution. On some of them has been deciphered the signature of Assyrian kings, and on others are strange cuneiform inscriptions, throwing light on the history and customs of the people. From the ruins of the ancient city of Nippur is an assortment covering a period of more than 3,000 years. On a

fragment of an axe is an inscription of which the following is a translation: "To Bel, his Lord Nazi Meruttash Kuri Galzu has presented this axe of bright lapis lazuli,

to hear his prayer,  
to grant his supplication,  
to accept his sigh,  
to preserve his life,  
to lengthen his days."

Other universities and colleges have also many curiosities, only a few of which can here be described. Princeton, for instance, displays a large portrait of Washington, which for more than a century was not removed from its home in Nassau hall. The frame which contains it originally held a portrait of George II, and at the battle of Princeton the picture was destroyed by a cannon-ball, but the frame was left intact. Among other relics are a commencement programme of 1760, printed in Latin, and a number of old diplomas, one of them dated 1749, when the college was located at Newark, and signed by Aaron Burr, father of the vice-president.

In addition to the catholic exhibit mentioned in the text, many of the leading protestant denominations are represented in the educational sections of the department of Liberal Arts, among them the presbyterians, episcopalians, methodist-episcopalians, and Christian brothers.

An exhibit worthy of more than a passing glance is that of the Carlisle Indian school, in the east gallery of the Liberal Arts department. In addition to specimens of penmanship, map-drawing, etc., there is a collection of uniforms, underclothing, and fancy work in glass cases, all made by the pupils, and entirely by hand, as also was a large wagon, with harness and running gear for government use.

Among the educational exhibits in the south gallery is one from the department of scientific temperance in connection with the Woman's Christian Temperance union. One of the purposes of this



LA VIGNE

organization is to provide for hygienic instruction in the public schools, with special reference to the effects of alcoholic liquors and narcotics.

For the testing of musical instruments provision was made by the department of Liberal Arts, first in an adjacent building at the north end of the peristyle, where is a recital hall with seating capacity for 500 persons, and second in the spaces allotted to exhibitors, who were invited to appoint from their own number a committee to prepare a series of programmes, both for the recital hall and the musical sections of the Manufactures building. A necessary regulation was that during the time assigned to special exhibitors, other instruments in the vicinity were to be silent.

South of Fifty-seventh street, on Stony Island avenue, and adjacent to the Fair grounds, is the International Sunday School building, which is practically devoted to an exposition of the most effective methods of religious work among children, and may be classified in the department of Liberal Arts. Here are headquarters for the Sunday School workers of the United States and Canada.





## CHAPTER THE ELEVENTH

### WOMAN'S DEPARTMENT

AMONG the features which distinguish the Columbian from all former international expositions are the scope and character of its Woman's department; and among the most pleasing exhibits of that department is the building which contains them. For the first time in World's Fair annals, as I have said, a special edifice has been devoted to the purposes of that department, or rather to a portion of its purposes, for, side by side, not only in the great temples of industry, but in state and foreign pavilions, are specimens of male and female workmanship. For the first time also has been designed by a woman a structure fashioned for such uses.

In the plan of this building we have the result of a national competition, but of competition only among women, the choice being made from a large number of designs, not a few of which were of unquestionable merit. The successful candidate was Sophia G. Hayden, a graduate of the architectural school of the Massachusetts

institute of technology; and in the evolution of her scheme she has presented a neat and artistic solution of one of the most difficult problems of the

Fair. In this building must be contained, not only a general and retrospective display of woman's work, whether in our own or foreign lands, but space must be provided for the exhibits of charitable and reformatory organizations, for a library, an assembly-room, for parlors, committee rooms, and administration and other purposes. All this must be accomplished in a space 400 feet long by half that width, adjacent to the Midway plaisance and the Horticultural hall.

Selected for its skill of detail no less than for its grace and harmony of design, this composition is the work of a professional architect, and not, as some would have us believe, of an architectural scholar; for if Miss Hayden was before unknown to the profession, she has here given proof that she is far above amateur rank. If in her design its feminine features are somewhat pronounced, that is as it should be. As one of her brother architects observes, "It is proper that such a building should take its place with the other architectural productions in Jackson park, and it is eminently proper that the exposition of woman's work should be housed in a building in which a certain delicacy and elegance of general treatment, a smaller limit of dimension, a finer scale of detail, and a certain quality of sentiment, which might be designated in no derogatory sense as graceful timidity or gentleness, combined, however, with evident technical knowledge, at once differentiate it from its colossal neighbors, and reveal the sex of its author."

In style the building is modelled after that of the Italian renaissance,



CHARITY





WOMAN'S BUILDING





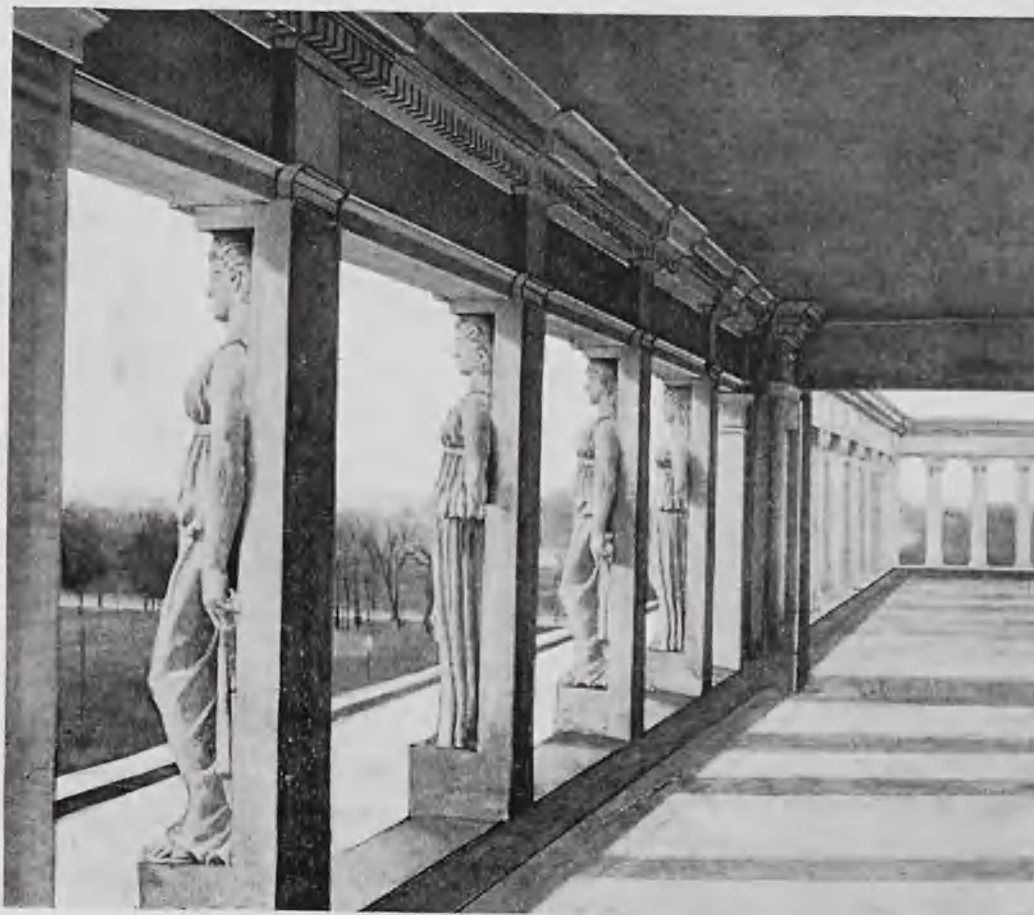
VIEW FROM BALCONY WOMAN'S BUILDING

with the façades of the first story fashioned in the form of an Italian arcade, and surrounded with a portico, the roof of which serves as a balcony for the second story. The colonnade of the upper story is suggestive of the Corinthian order, and between the columns are windowed spaces, adapted to the comparatively small dimensions of the chambers within. The principal entrance is in the form of a triple arched pavilion, flanked by a surface of solid wall, with double pilasters, above it an open colonnade of the same design as those on either side, and with the pediment richly decorated in bas-relief. In front the corner pavilions are similarly treated, as also are the side entrances, but without pediments, and with rows of pilasters in place of colonnades. Over the side entrances is a third or attic story, opening at the main roof on gardens, around which is a screen of pilasters. From the central pavilion spacious stairways lead to a terrace a few feet above the water, where a landing is built on the northern arm of the lagoon.



LEIF ERIKSON

In the interior is a central hall opening into a rotunda, with decorated skylight, unencumbered by columns, and of sufficient altitude to admit the light from rows of clear-story windows. On both floors this open space is surrounded with



UPPER PORCH





AMERICA, VINNIE REAM HOXIE

open arcades, those on the upper story serving as galleries, and resembling somewhat the corridors of an Italian courtyard. The interior plan displays the most careful economy of space in providing for suites of connected apartments, differing in size but for the most part of almost domestic proportions, and with due regard to lighting, circulation, and communication. The appearance of the building is in harmony with the conditions from which its design was evolved, suggesting rather the lyric features of the Art palace than the heroic aspect of the larger temples of industry and science, and with a grace of expres-

sion worthy of its uses and its artificer.

For the decorative as for the structural scheme of the building designs were invited among women qualified for such work throughout the United States, and after eager and close competition the prize was awarded to Alice Rideout, of San Francisco, by whom were modelled the compositions on the main pediment and the symbolical groups of the roof-gardens. All the groups are more or less typical of the part that woman has played in the history of the world, of what has been, is, and will be her sphere of duty and influence. The mural paintings, with other ornamental features, as the carved wainscotings, screens, and balustrades, the tapestries and panels were also contributed by women, while from many of the states came offers of cabinet woods, marble and other materials in quantities larger than could be accepted, though to some was granted as a privilege the right of furnishing and decorating their own apartments and interior decorations.

On the roof are winged groups typical of feminine characteristics and virtues, all in choicest symbolism, one of the central figures representing the spirituality of woman, and at its feet a pelican, emblem of love and sacrifice. In the same group charity stands side by side with virtue, and sacrifice is further symbolized by a nun, placing her jewels on the altar. In another group is the genius of civilization, with the bird of wisdom at her feet; on the right a student, and on the left a woman groping in intellectual darkness but struggling after light. These and others, together with the figures on the pediment, typical of literature and art, of charity, beneficence, and home are from the hand of the San Francisco sculptress. On the frieze is a figure of youth, and on the panels of the entrance-ways are represented the occupations of women.



VINNIE REAM HOXIE



ENTRANCE





INTERIOR WOMAN'S BUILDING

To Mrs Candace Wheeler, of New York, was given the superintendence of the interior decorations, the most noteworthy of which are the paintings at either end of the rotunda, where is the court of honor. On the north tympanum, under the name of Bertha H. Palmer, primitive woman is depicted by Mrs Frederick Mac Monnies, of St Louis, the central figure representing motherhood, with women on either side sowing seed and carrying jars of water. Upon the opposite tympanum is modern woman, beneath the name of Sophia G. Hayden, typified by a group of young girls in pursuit of a figure of fame, which is disappearing in the distant blue of the heavens. A broad frieze surrounds the gallery, and between its arches are inscribed on the intervening panels the names of women whom the world has honored, from Rebecca and Ruth to the celebrities of the present day.

From the corridors which surround the court, on the



SPEAKER'S STAND, ASSEMBLY ROOM



SAPPHO, BY ADELAIDE MANAN

second floor, open the various parlors, exhibition rooms, and assembly chambers. The northern end of the main hall is decorated in gold and white, its windows of stained glass adding to the effect. The central window was furnished by Massachusetts, and symbolizes



the part which that commonwealth has played in the advancement of woman. It is flanked by two smaller ones, presented by the women of Chelsea and Boston. The walls are covered with portraits of some of the more prominent personages in the cause of education, reform, and philanthropy. A large space is occupied by a picture of Burdett-Coutts, with models of some of her institutions, and other illustrations



of her labors. The figure of Fredericka Bremer is the most prominent in the Swedish gallery. France, Norway, and the United States have also their niches of fame filled by such women as Lucretia Mott and Harriet Beecher Stowe.

The Connecticut chamber and the woman's library open from the western corridors. In the decorations of the library is a subtle combination of colors, the ceiling, painted by Dora Wheeler Keith, daughter of Mrs Candace Wheeler, resembling the frescoes of some old Venetian palace, although the

symbolic treatment is appropriate to the purpose. In the central oval, enclosed by a wreath of white lilies, literature is typified by a shapely woman, science by a man in scholastic garb, and imagination by an angel with outstretched wings. Between this oval and the Venetian border which encloses the ceiling, are loops and folds of drapery in softly blended hues representing the tints of sky and landscape, and at the four corners are medallions symbolic of history, romance, poetry, and the drama.



PAINTINGS, MAIN FLOOR



The small but tastefully furnished and decorated parlor occupied by the women of Connecticut is hung with pictures from the hands of the daughters of that state, and in addition to its other purposes serves as a reception room for the commissioners of foreign countries. Into the eastern corridor open the reception rooms occupied by the state boards, and by the women of California, Ohio, and Kentucky. Though intended for residents of those states, the parlors are open to the public, as examples of decorative art. The California department has been called the cactus room, from the fact that its coloring and decorative scheme are largely in imitation of that plant. Mrs Frona Eunice Wait, the commissioner from California, was the originator of the idea, and carried on the actual work. A pleasing effect is produced by the grayish green of the cactus, as seen



PRIMITIVE WOMAN, DECORATION OF SOUTH TYMPANUM

in the glass windows and draperies, and the warm, rich hues of the polished redwood floor, the panelled ceiling and walls. The furniture of native woods is ornamented with similar designs, as are the carvings on the panel frames of ceiling and walls. On one side is a large mirror, and above it a panel of redwood, upon which is the shield of the state elaborately carved. The floor is partially covered by the skin of a grizzly bear from Humboldt county, and on the panels of the walls are pictures by prominent California artists, representing the flora of the state, and such scenes as the old San Francisco mission, the Cliff house, Mount Hamilton, Lake Tahoe, and Mount Shasta. Busts of native Californians are placed on pedestals of native onyx and marble;



MODERN WOMAN, DECORATION OF NORTH TYMPANUM

some of the draperies are of home-made silk, and there are vases fashioned by members of the Ceramic club of San Francisco, with other specimens representing the arts and industries of the golden state.

The largest of the suite is Cincinnati's parlor, the decoration of which was in charge of Agnes Pitman, of that city, daughter of Benjamin Pitman, who for years has been identified with its academy of design. Under the direction of her father Miss Pitman carved the first table thus decorated by a woman in Cincinnati, and here exhibited as a curiosity. Wood-carving is now a popular branch of industrial art among her women, and beautiful specimens of their handiwork are to be seen in the ceiling and in the furniture of the apartment. Around it is a frieze of floral design, shading from a pale cream color to a dark brown tint, and beneath the frieze is a border of buckeye leaves and blossoms, with tasteful mural designs. In a case near the centre of the room are specimens of Rookwood and other pottery from the women of Cincinnati. Over the door is a group named The Jury, representing in ceramic work a cluster of owls; and among the statuary may be mentioned a marble





ELIZABETH CADY STANTON

figure of Ariadne, and a statuette of Evangeline in terra cotta.

Kentucky's room is called the colonial parlor, its ceiling divided by massive beams, the supporting columns of which are entwined with sprays of wild roses. The mirrored windows and the old fashioned fireplace are in keeping with the general design, the brass andirons being loaned by a member of the family of Cassius M. Clay. By other old and prominent families was contributed most of the antique furniture, including a sofa which was the property of President Tyler, and a chair used by Elder Brewster, of Plymouth colony, more than three centuries ago. There are



DR. C. B. WINSLOW

these walls of white and gold, and there is statuary by the artificer of the caryatides on the Woman's building, with tasteful specimens of ceramic work.

In the extreme southeast corner of the second floor, near the so-called organization room, is the office of the president, Mrs. Potter Palmer, commonly termed the fish-net room, with seines festooned from the ceilings, a casting net forming a canopy over the president's desk, and figures representing women engaged in making eel pots, nets, baskets, and other articles connected with the fisheries. For this collection there was no place in the Fisheries or other build-

ings, and here through the efforts of the president and lady commissioners, and of delegates from several of the states was found for it a suitable home with adequate representation. Among the decorations is a water-color painting of New Jersey's sea-coast birds by Hardenburg with designs in fish-scales, and specimens from women taxidermists. By Mrs. Williamson, secretary of the State Charities Aid association of New Jersey, and a member of the school of pedagogy in connection with the university of New York, was originated the decorative scheme of this chamber, and to her is largely due its unique and tasteful equipment.

The women of New Jersey supplied the antique colonial furniture, including tables, chairs, sofas, and a piano in use as early as 1750, some of them valuable relics of the colonial and earlier republican eras contributed by the oldest families of Salem county, New Jersey. Of such relics, in which the county is exceptionally rich, there are catalogues in the president's office prepared at the request of the Board of Lady Managers by Miss Anna Hunter Van Meter, chairman of the county committee on antiques.

Opening on the eastern corridor is the chamber set apart for the headquarters of the several state boards, with its dainty screens, embroideries, and mural decorations



SILVER CANDELABRA



LUCRETIA MOTT



SUSAN B. ANTHONY





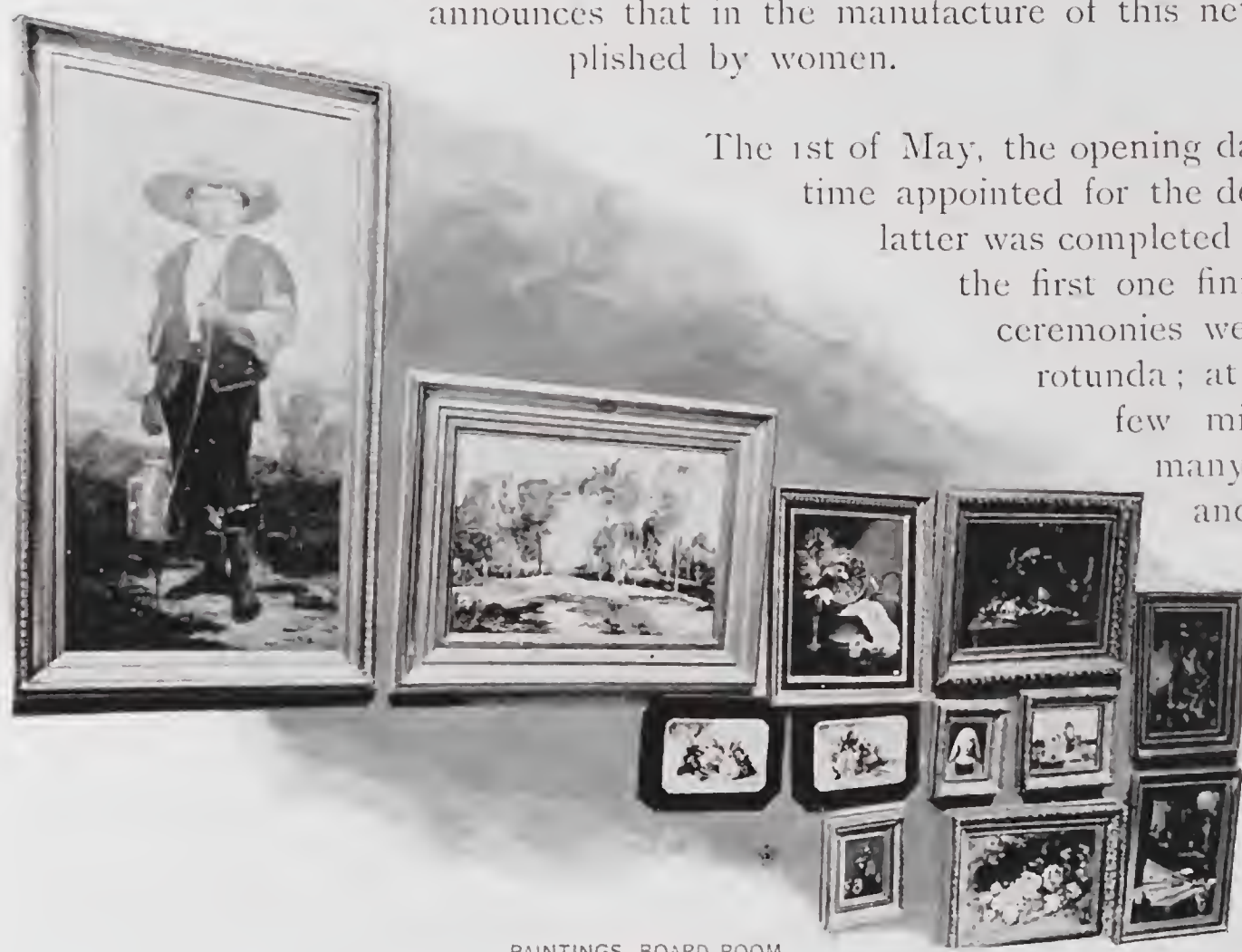
WALL OF BOARD ROOM



CORNER IN BOARD ROOM

from the hands of female artists of Kyoto, Japan.

Special features are the ornamentations of the ceiling, with paintings on silk, and the panels fashioned of bamboo frames. Diagonally opposite the president's room is the model kitchen and the audience hall, the latter also festooned with netting. A placard on the wall announces that in the manufacture of this netting ninety per cent of the work was accomplished by women.



PAINTINGS, BOARD ROOM

The 1st of May, the opening day of the Columbian Exposition, was also the time appointed for the dedication of the Woman's edifice, though the latter was completed long before that date, and as I have said was the first one finished of all the department buildings. The ceremonies were held in the court of honor, the hall of the rotunda; at two o'clock the doors were opened, and a few minutes later every chair was occupied, with many hundreds crowding the passage ways, and many thousands who could find neither seats nor standing room. On the platform, in front of which the Spanish colors, flanked by those of other powers, drooped from the gallery overhead, were the Lady Managers and their invited guests, among whom the presence of some of the most prominent women of the time, including Lady Aberdeen, the duchess of Sutherland, the countess of Craven, the duchess of Veragua, the Russian

princess Schalovsky, and the Swedish baroness Thomburg-Rappe, with a goodly representation from our own and other lands, attested the world wide interest in the Woman's department.

By way of overture was rendered the grand march of Jean Ingeberg von Bronsart, followed by prayer from Miss Ida Hultin, after which came another musical number, composed by the English musician, Frances Ellicott. Then to the front of the platform stepped the daughter of Professor Wilkinson, of the University of Chicago, by whom was written and read the dedication ode, its theme a tribute to Isabella of Spain, less as a sovereign than as a woman, and with eloquent lines descriptive of the part which she played in the Columbian episode. The dedicatory address was delivered by Mrs Potter Palmer, whose impressive description of the sphere, rights, and duties of women



BOARD ROOM



SOPHIA G. HAYDEN





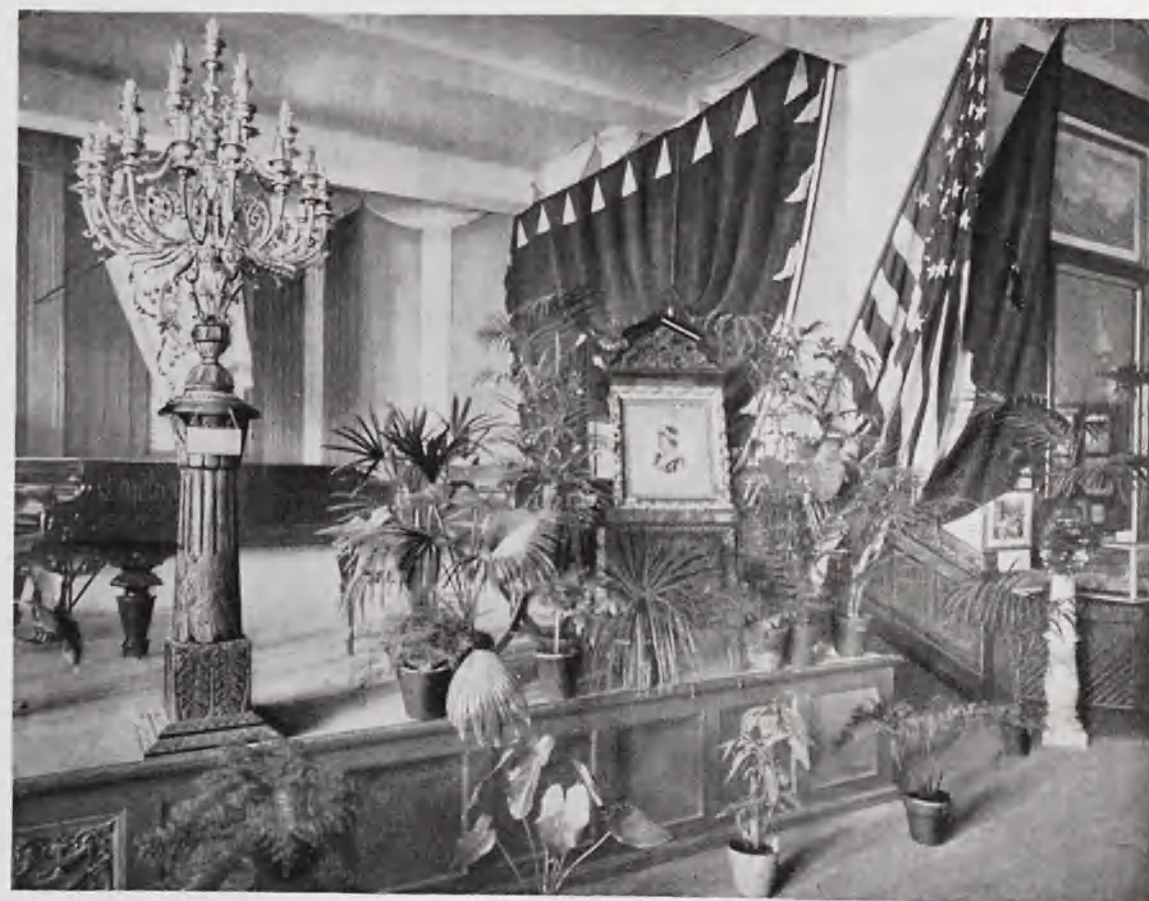
MRS POTTER PALMER'S ROOM

concluded with a graceful acknowledgment of the kindly and earnest coöperation of foreign nations. Then shorter addresses, with greetings, were offered by foreign participants, Italy being represented by Madame Marietta; Great Britain by Lady Aberdeen and the well-known philanthropist, Mrs Fenwick Bedford; Germany by a lady professor who repeated the words of her empress, and Russia by the princess Schalovsky, who begged that in thought at least her countrywomen might clasp hands with their American sisters. The ceremonies ended with the presentation to Mrs Potter Palmer, first of a silver crown, fashioned as a laurel wreath, and then of a golden nail, the gift of the women of Montana, which, when driven home into the place prepared for it, gave the finishing touch to the building. Finally the tones of the benediction proclaimed the opening of a department planned and created by woman's effort, and filled with woman's work.

As with the Woman's building so with the exhibits by women, they form of themselves a unique and distinctive feature of the Exposition, such as never before was presented to the world, such as never before was attempted. Not as at the

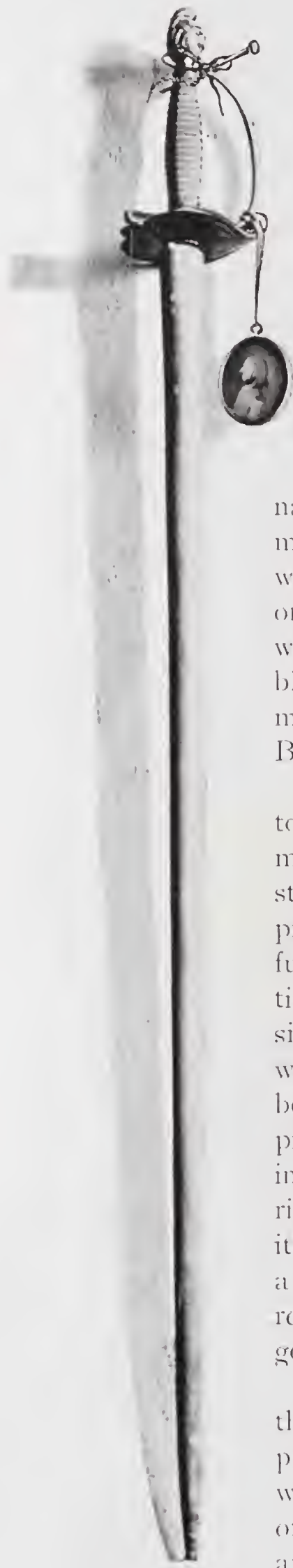


ANTIQUE FURNITURE IN MRS PALMER'S ROOM



CORNER IN ASSEMBLY ROOM





LAFAYETTE'S SWORD

international fairs held in London, in Paris, and Vienna, have these collective specimens of woman's industry and art been cast into such nooks and corners as might be spared by the several departments. For the first time they were housed in a home of their own, in one of the most beautiful homes among all these palatial groups, or in the larger buildings were arrayed in open competition with the workmanship of men. At the Philadelphia Exposition, it is true, and also at the Cotton Centenary Exposition held a few years later at New Orleans, there were comprehensive exhibits of woman's work that more than merited the attention they received; but here we have not a mere adjunct of the Fair but an integral and most interesting portion of it, one recognized by the national legislature, approved by the commission constituted by that legislature, and with the earnest and cordial support, not only of our own but of European nations, whose titled dames, even those of royal blood, did not disdain to serve on committees acting in coöperation with the Board of Lady Managers.

In the act of congress which gave to the Fair the sanction of our government, the National Commission was instructed, as we have seen, to appoint and prescribe the duties of this board, whose functions and operations have been partially described in connection with Exposition management. Among those functions was the selection of "one or more members of all committees authorized to award prizes for exhibits which may be produced in whole or in part by female labor." Thus was conceded to woman, not as a favor, but as a right, such representation in the control of affairs as enabled the board to present to us, in all its symmetry of design and perfection of detail, their Woman's department. Here was in truth a most proper, a most significant concession, and as the president of the board has well remarked, "Even more important than the discovery of Columbus was the fact that the general government has discovered woman."

To the more thoughtful class of visitors one of the most interesting exhibits contained in the Woman's building is that which represents in the form of a retrospective collection, from prehistoric eras to the age in which we live, the contributions made by women to the huge workshop of which this world so largely consists, their contributions not only to the industries of the world but to its sciences and arts. Thus it is hoped in a measure to dispel the prejudices and misconceptions, to remove the vexatious restrictions and limitations which for centuries have held enthralled the sex.

In their preliminary announcement, the managers thus outline the purpose of these exhibits: "It will be shown that women, among all the primitive peoples, were the originators of most of the industrial arts, and that it was not until these became lucrative that they were appropriated by men, and women pushed aside. While man, the protector, was engaged in fighting or the chase, woman constructed the rude semblance of a



ANTIQUE FURNITURE



A PIANO OF 1750

home. She dressed and cooked the game, and later ground the grain between the stones, and prepared it for bread. She cured and dressed the skins of animals, and fashioned them awkwardly into garments. Impelled by the necessity for its use, she invented the needle, and twisted the fibres of plants into thread. She invented the shuttle, and used it in weaving textile fabrics, in which were often mingled feathers, wool, and down, which contributed to the beauty and warmth of the fabric. She was the first potter, and molded clay into jars and other utensils for domestic purposes,







BARONESS BURDETT-COUTTS



COUNTESS DI BRAZZA



DUCHESS DE VERAGUA



LADY ABERDEEN



MRS JOHN J. BAGLEY



PRINCESS SHAHOVSKY



MRS FRANCIS B. CLARK



MRS BENJAMIN WILLIAMSON



MRS FRENCH-SHELDON



MME DUPUY DE LOME



MRS RALPH TRAUTMANN



MRS PRESIDENT DIAZ



drying them in the sun. She originated basket-making, and invented such an infinite variety of beautiful forms and decorations as put to shame modern products. She learned to ornament these articles of primitive construction by weaving in feathers of birds, by a very skilful embroidery of porcupine quills and vegetable fibres, and by the use of vegetable dyes. Especial attention will be called to these early inventions of women by means of an ethnological display to be made in the Woman's building, which will supplement the race exhibit to be made in the department of Ethnology."

To present, in some branches of manufacture, an entirely distinct collection of woman's work, would have been an impossible task, for who shall tell, for instance,



MODEL KITCHEN



TEMPERANCE PUBLISHING ASSOCIATION

in a piece of cloth, what part of the weft was woven by men and what by women, who may have worked side by side in fashioning the completed fabric? But, as I have said, in the Woman's department the decorations and exhibits of whatever kind are the work of woman's hands. As originally planned the building was to be used only for administrative purposes and assembly-rooms; but although feminine industries were largely represented in all the departments, as the work of organization progressed it became evident that many would be entirely excluded were not additional space provided. Thus it was that the Woman's building was so largely devoted to exposition purposes.

As to the distribution of woman's work in other departments of the Exposition, Mrs Palmer remarks: "In the department of charities and corrections, for instance, and also hospitals, many of the most important exhibits are from women, and we have gladly relinquished them in our building in order that they might be well represented in the Liberal Arts department.



COURT OF HONOR, WOMAN'S BUILDING





ITALIAN LACES





QUEEN OF ITALY'S POINT D'ARGENTAN

In the Fine Arts building also many of the best pictures by women are shown, as the space we could give them was extremely limited. In the department of Transportation twelve per cent of the exhibits are by women. In Horticulture forty-six per cent, and in Fisheries twenty-six per cent. We have also a fine showing in the department of Ethnology, and, it is useless to add, in the department of Manufactures, where woman's work would naturally appear to great advantage."



ITALIAN LACES

Passing through the main eastern portal, the visitor enters a large vestibule decorated by English artists. Philanthropy is represented in the person of Florence Nightingale ministering to sick and wounded patients in her hospital. On either side of her figure are symbolic paintings, and on the opposite wall is a central group typical of artistic needle-work.

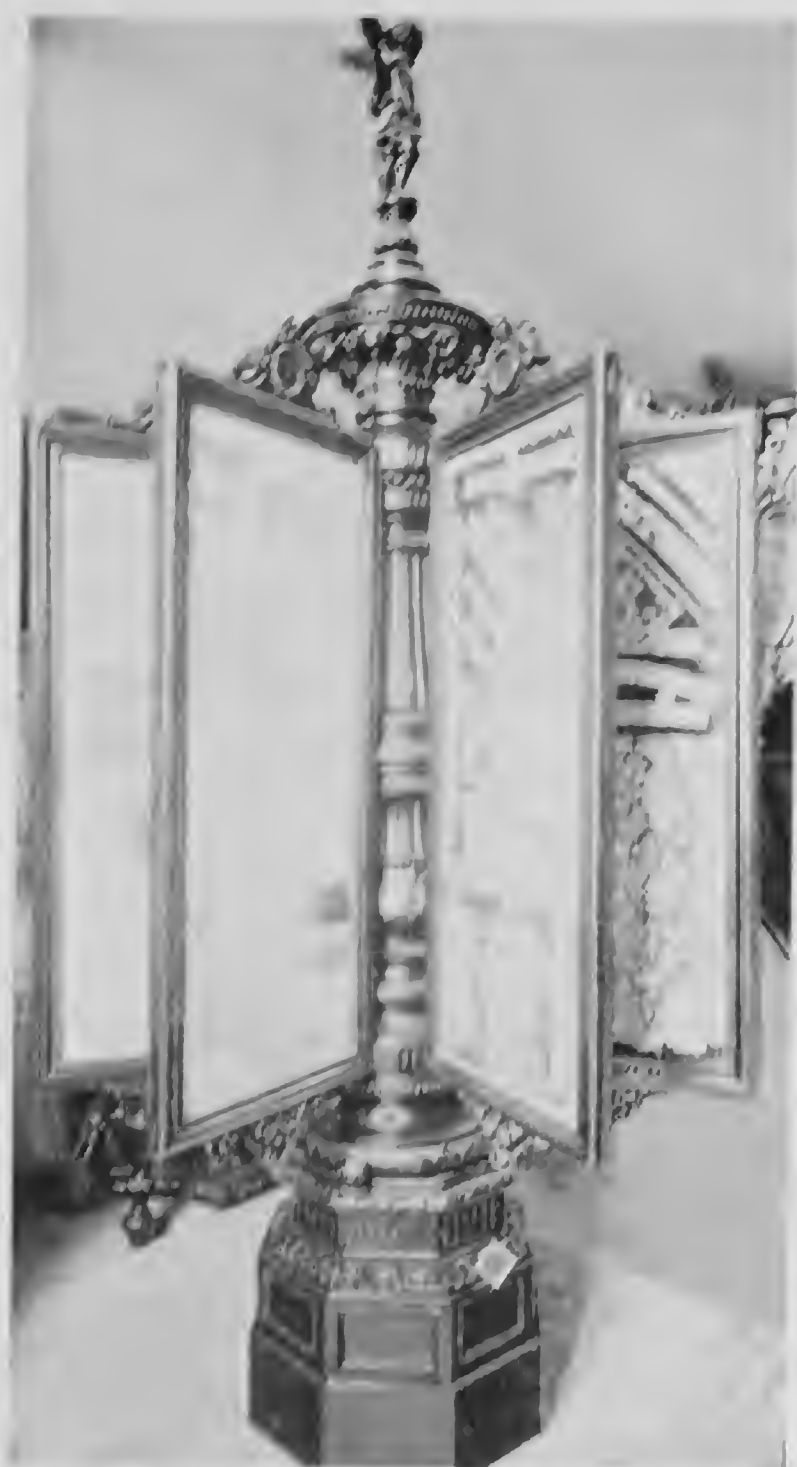
Turning to the left we enter the suite of rooms, containing the ethnological groups and those which demonstrate the practical ingenuity of woman. The collection from the Smithsonian institution is at the entrance to this section, and is mainly illustrative of woman's work among the native races of the western continents. In a gallery of portraits are shown the various types of Indian women in North and South America. There are cases filled with costumes, needle-work, utensils, bodkins, tools, baskets, pottery, netting, and the like. There are primitive shuttles, distaffs, and looms, made of reeds and rough wood, samples of skins dressed by Eskimo and other Indians, tapa cloth from Polynesia, matting from Africa, and blankets from the Navajos of the southwest.

In one of the landings on the southwestern staircase, the work of manufacture is shown in actual operation, in a booth fashioned of the products of a loom manipulated by a Navajo woman of Colorado.



MRS CANDACE WHEELER





ITALIAN LACES



CENTENNIAL EXPOSITION SOUVENIR

In the exhibit of the Smithsonian institute one of the most remarkable evidences of skill among semi-savage women is also from Navajo looms, and some of the basket-work made by North American Indians is so closely woven that it will hold water. Montana and Utah have special displays, Skull valley being the locality represented in the latter territory. Among the Smithsonian specimens illustrative of woman's work is the exhibit of laces and kindred fabrics, including a thousand samples, so arranged as to represent different periods of manufacture. Those selected prior to 1550 are merely knotted net, darned, and cut work. Then come point, bobbin, Venetian, Milanese, Genoese, and Flemish laces, with those peculiar to France and England, all the schools being represented in this assortment, which was loaned by Thomas Wilson, of the national museum.

By Mrs French-Sheldon, who travelled through eastern Africa at the head of a large caravan, unattended by any of her sex, were placed in the ethnological section many curios collected during her expedition. Among them are spears, great and small, knives finely tempered in charcoal fires; beads of brass, copper, and iron, and various utensils made of gourds, traced with heated wires in Persian and Arabesque designs. The last are copied mainly from articles obtained at the bazars held by the Arabs of the coast. There are also curios presented to Mrs French-Sheldon by Frederick Taylor, of New York, procured while travelling in Madagascar; including colored silks, the white caps of the Hova soldiery, and other samples from the more intelligent portion of the population. From the warlike Sakalavas, a tribe of fierce and swarthy savages living apart from settled communities, were procured two of their hideous war-masks, made of perforated terra cotta, fastened with fibres of the palm, and to which are appended long beards of goats' hair.

From the ethnological section we enter an apartment which contains the inventions and patents of women; and here is sufficient evidence that aside from purely feminine industries women are applying themselves to pursuits of practical utility. Among their inventions are weaving and washing machines, refrigerators, dusters, flour sifters, egg beaters, meat boilers, beef mangers, frying pans, trunks, and apparatus for detaching runaway horses from vehicles, with patent surgical bandages, hot-water appliances and sanitary dinner pails and filters; all these in addition to a choice display of needle-work, ceramic ware, paintings and statuary, engravings, etchings, and photographs. Near the entrance to the educational section, north of the vestibule, is a large picture representing the wreck of a ship and the rescue of her crew, while a portion of the wall beyond is covered with charts, testimonials, patent papers, and other evidences of the general adoption of the signal system invented by Mrs Martha J. Coston more than thirty years ago. This is the only system of night signals recognized by the United States government and the British board of trade, adopted also in part by France, Italy, Denmark, Holland, and Brazil. There is probably no prominent steamship line, or life-saving station in the world which is not familiar with this patented invention of a woman. In the exhibits of the educational department are illustrated the methods of woman's training, physically, industrially, and intellectually. New York sends an array of architectural drawings, and designs for carpets, book covers, wall-paper, oil-cloth and printed textiles, the bulk of the contributions coming from the school of Applied Designs for Women, the school of Industrial Art, and



MONTANA NAIL



the Pratt institute. Physical culture is represented by the Bryn Mawr school, of Baltimore, and there are many individual proofs of efficiency in the field of professional work. From Turkey comes a small collection of drawings, needle-work, and other evidences of female industry, from the American school for girls, at Scutari. The medical profession is represented by the Pennsylvania college for women, at Philadelphia, and nursing, as a profession for women, by the New York and Brooklyn training schools, and the Philadelphia hospital for nurses.

Adjoining the educational section is one in which are traced the processes in several branches of female industry, the exhibits being of a somewhat miscellaneous character. At the entrance is typified, in the form of a large Pennsylvania sheep, the shearing industry, in which thousands of women are employed. A case filled with raw silks and silken fabrics represents the work of Utah women, and their many sisters, throughout the states, engaged in the raising of cocoons. Elsewhere are portable kilns, patented by women, with various articles of pottery; and from the women of Iceland is a display of hand spun and knit woolen goods, hosiery, and gloves.

Entering the rotunda, or court of honor, the visitor sees on one side a bust sculptured by Sara Bernhardt, and on the other the reproduced fragment of an old Italian statue, while on the walls are pictures representing the best work of women in all the national schools. The body of the hall is filled with long lines of cases containing choice specimens of needle-work and ivory painting. Around the central fountain, with its border of aquatic plants, is a cluster of statuary, consisting of figures of Psyche and Maud Müller, and busts of C. B. Winslow, Susan B. Anthony, and Elizabeth Cady Stanton, with a group allegorical of the west by Vinnie Ream Hoxie, of New York, one of the pioneers among female sculptors. Near the western vestibule is also her statue of America, and this section is further beautified by several mural paintings of French artists, and by a bronze statue of



INVENTIONS AND PATENTS



EDUCATIONAL DEPARTMENT





MEXICAN SECTION, WOMAN'S BUILDING

both showing quaint and tender touches of child life; and *The Wandering Jew*, a powerful work by a German painter. Below is arranged a choice display of decorated fans, miniatures, and other articles of vertu. British-Indian and Bohemian fabrics may also be examined in a series of cases which cover a large portion of the ground floor, and many ingenious specimens of needle-work from the Bohemian Industrial museum, represent her earlier periods of national industry, under the title of *Our Mothers' Work*. A large area in the northern portion of the hall is occupied by the Danish exhibits, the location of which is indicated by figures of peasant women attired in national costume. The cases are filled with paintings, fine needle-work, laces, specimens of ancient silver work, and antique spinning-wheels. In one of them are the laces, embroideries, table-covers, and pictures contributed by the royal family of Denmark, with roses painted by the queen, fruit by the princess Waldemar, and from the princess royal a collection of laces and handkerchiefs. Italian, Austrian, English, United States and Mexican works occupy sections of the western walls of the rotunda, one of the largest and strongest paintings in this portion of the court being that which represents, in the British division, *Eurydice sinking into Hades*. The industrial arts find expression in the cases ranged along the hall, toward the south, containing, among other samples, the laces of Russia and Austria, and specimens of elaborate needle-work from the nunneries of Mexico. Among other objects of interest is the table presented by the women of New Mexico, and designed to show the mineral resources and filigree silver industry of Santa Fé and the mining district adjacent. On its face is a gold medallion of the territorial seal, with historic buildings reproduced in silver repoussé. The gold, silver, and copper, the turquoises, garnets, agates, and petrified woods of which the table is largely constructed are all of local production.

The south wing of the building and the western half of the north wing are substantially occupied by exhibits from

Leif Erikson, by Anne Whitney, the Boston sculptress. On one of the walls of the northern corridor is a shield of polished copper, and across its face a silver bow, with string of golden wire, and in raised silver letters the inscription, *Silver Bow county, Montana*. The shield is surrounded by a border of gold, silver, and copper, with designs of the state flower, the bitter root. Silver nails fasten the bow to the shield, which is adorned with Montana rubies and sapphires, and with medallions of copper and silver in low relief, representing various mining scenes.

Spain, France, and Germany cover the eastern walls with paintings by prominent female artists, among which may be mentioned the two French canvases named *The Bath*, and *Jean and Jacques*,



PRESIDENTIAL CHAIR, MEXICO





MEXICAN APRON

foreign countries, Great Britain, with her dependencies, filling the largest area. The embroideries, tapestries, and other articles contributed by the royal school of art needlework comprise many beautiful specimens of feminine skill, not a few of which are from the princess of Wales and her daughters. From the future queen-consort comes a chair, with carved frame of stained walnut, and seat of ornate leather work; the princess Louise sends a delicate sofa cushion of white silk, embroidered with primroses, and Maud and Victoria, piano-stools ornamented with their work in the form of dahlias, while from Queen Victoria

is a rich tapestry, whose central figure represents Pomona, wrought in colors which blend like those of ripe fruit. Among the screens noticeable for their beauty is a Louis Quinze, panelled with satin, and decorated with blue bows and sprays of

flowers. In the piano-covers, bed-spreads, cushions, fans, vellum book-bindings, laces, wood-carvings, and ceramic wares are illustrated the many industrial pursuits of English women, and especially such as are fostered by the societies which have their headquarters at the Kensington museum.

But the most striking exhibits in the British section are those that pertain to education. Here Girton and Newnham colleges, Cambridge, Lady Margaret and Somerville halls, Oxford, the Cheltenham Ladies' college, Queen's college, Belfast, Alexandria college, Dublin, Queen Margaret's college, Glasgow; all these and others in Great Britain for the higher education of women, are represented in a collection of photographs and reports. There is also a small gallery of the portraits of children, and appended to this collection of comely, fresh looking faces is the motto, *Non angli sed angeli*. The department of philanthropy is in charge of the baroness Burdett-Coutts, and illustrating certain phases of charitable work in England are models of a children's holiday home, a crèche connected with the Ragged School union, and a cabmen's shelter decorated by the London Flower Girls' mission.

The women of Ireland, Scotland, and Wales have organized separate exhibits. Very homelike seem the knitted underwear and bed-spreads made by the people of Wales, and quaint are the living and wax figures of Welsh spinners



MEXICAN LACE



MEXICAN FILIGREE WORK



SPANISH WAX FIGURES





BRITISH NEEDLE-WORK

to the historic interest of the Scottish exhibit are antique laces, curtains, embroideries, draperies, and screens, characteristic of various periods in the country's history. The oldest is a portion of a hanging in green velvet, embroidered with raised needle-work, a style popular in Scotland during the later dynasty of the Stuarts. Another interesting specimen is in the form of an Arab frieze, fashioned of pieces of cloth, leather, and tinsel, sewed

in their tall sugar-loaf hats, such as are treasured as family heirlooms and barely considered respectable until worn on Sundays and feast-days by the women of several generations. From Scotland the women of Argyle send tartan hose, and those of Aberdeen socks, gloves, and stockings, with embroideries designed in Turkish patterns. Among antiquarian treasures is the embroidered coverlet from the bed of Patrick, earl of Kinghorn, said to have been worked in 1606, and loaned by the countess of Strathmore, with a portière from Lady Aberdeen, made in 1740 by the countess Anne. From another contributor



QUEEN OF ENGLAND'S EXHIBIT

upon a background of plush, the figures, thus formed in relief, representing Arab chieftains and Bedouins of the desert—men, women, and children. This also is the handiwork of a woman who learned the secret of the art while travelling in Egypt.

In conjunction with the Industries association, Ireland has a neat exhibit of laces and embroidered church vestments. Among the latter are a robe ornamented with an old Celtic cross, worked by the nuns of Kenmare, and an elaborate floral design, in many colored silks, contributed by the royal school of Art Embroidery. New South Wales and Canada have also unique displays of woman's work, the former sending us, among other articles, a cow and calf modelled in wax, and covered with natural hair.

The Russian exhibits, adjoining those of Great Britain on the east, are under the immediate direction of the grand duchess Elizabeth, of Moscow, sister-in-law to the czar. They include a large display of laces and embroideries, with several collections designed to show the progress of Russian women in the practice of medicine and surgery, especially in relation to hospital service. The wives of governor generals throughout the entire empire aided in furnishing a complete representation of woman's work in Russia. Thus from the valley of the Amoor and the northern arm of the Volga, and from all the vast stretch of territory between Russian Poland and eastern Siberia, came specimens of female handicraft. Of excellent quality are the samples from the province of Kazan, including rich embroideries in silk, silver, and gold, on a groundwork of satin, linen, and leather. The native dress of peasant girls, and the court costumes characteristic of imperial dynasties,



QUEEN OF ENGLAND'S WORK





BRITISH NEEDLE-WORK

are illustrated by models suitably attired. One of the dresses is said to have been worn by a member of the court during the reign of Ivan the Terrible, three centuries ago. There is also reproduced a convent door in Moscow, with its multitude of gilded figures, the groundwork of turquoise, and in the centre a curtain of olive-colored velvet on which are designs in antique lace.

In one of the cases in this vicinity is represented a work of philanthropy undertaken by English women at the time of the Russo-Turkish war of 1877. During that war many Turkish women flocked into Constantinople, and hearing of their destitute condition, Lady Layard, wife of the British ambassador, and Baroness Burdett-Coutts established a fund for their relief. As the sufferers were experts in oriental needle-work, possessed of many secrets in construction and design that were a revelation to their patrons, they were encouraged in these industries. The various colors which they were accustomed to weave into their fabrics, and the simple designs with which they adorned them, were modified and elaborated by the methods of modern schools. Hence, while the exhibit known as that of the Turkish Compassion Fund contains many samples of embroideries, cushions, silks, and shawls, it has also specimens of elaborate ball-dresses, draperies, scarfs, and other articles of personal and domestic use and ornament. The proceeds from the sale of goods go toward the support of those employed, and for the care of the sick, supplying the needs of more than 2,000 Mohammedan women.

In the eastern portion of the north wing are the exhibits of the United States, or as announced over the entrance, an exposition of the applied arts of America. Here nearly every state in the republic displays its most artistic needle-work, its costumes, ceramic wares, mosaics, and other specimens of industry, largely contributed

by societies of national repute. The associated artists of New York have a choice exhibit of embroideries and tapestries, and among the costumes shown in this section is the dress worn by the late Mrs Benjamin Harrison at the inauguration of her husband as president of the United States.

West of the court of honor, adjoining the vestibule, are the telephone office, information bureau, and the

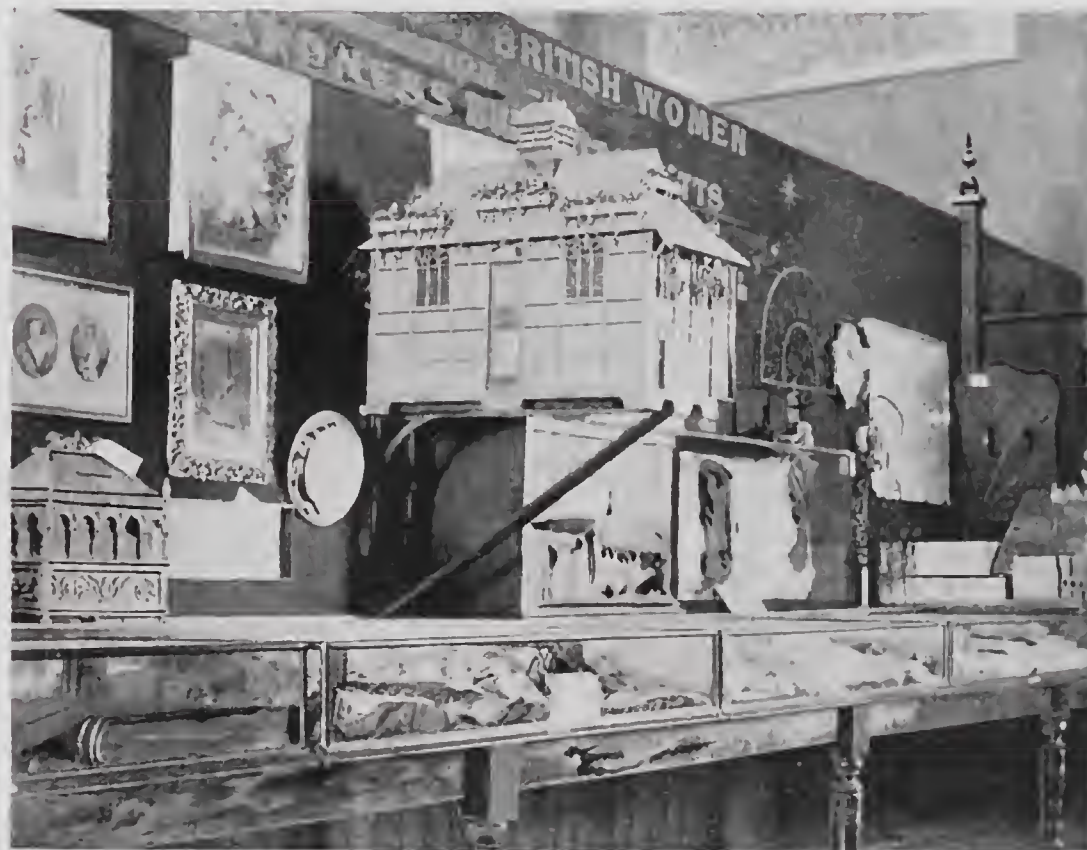
exhibits which illustrate the scientific education and attainments of women. Among them are many collections of minerals, fossils, and botanical specimens, gathered by women from all parts of the world. Woman's work in the surveyor-general's office finds expression in a series of maps and drawings, and Massachusetts, through the Prang Normal classes and various societies for the encouragement of home studies, illustrates certain phases in the scientific education of women. Here also is a case containing scientific works, including the *Notes on the Satellites*



WALES EXHIBIT

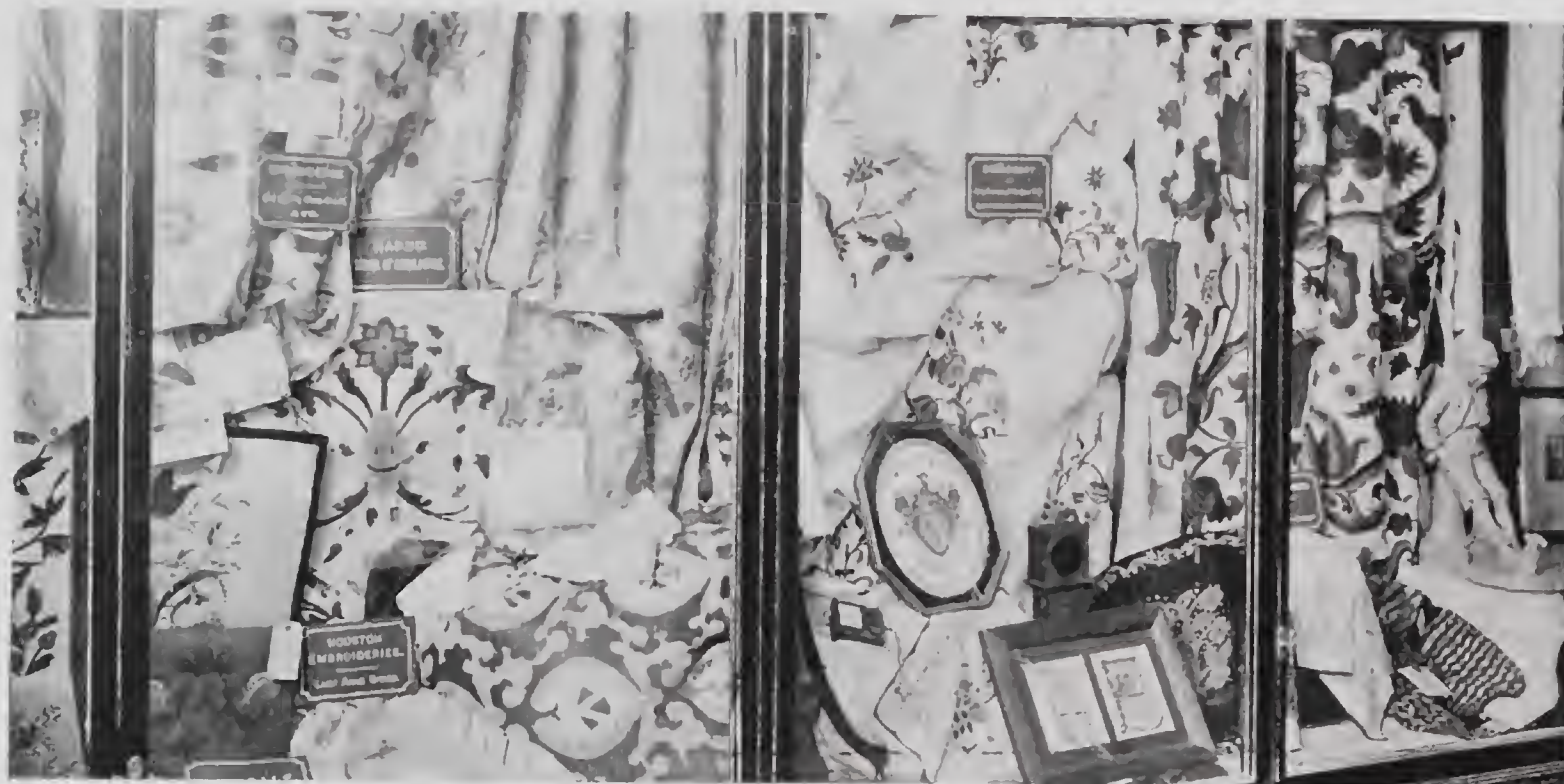
of *Saturn* by Maria Mitchell, late professor of astronomy at Vassar college.

Opposite the Russian section is a reproduction in miniature of the Sioux City corn palace, which may also be seen in other forms elsewhere in the Exposition. The one in the Woman's building was designed by Mrs William I. Buchanan, wife of the chief of the Agricultural department, and the model is the handiwork of the ladies of Sioux City. The paintings of flowers and fruits which appear to decorate the interior are in reality composed of kernels of corn and seeds of different colors, and the frescoes of the ceiling, of pampas



MODEL OF CABMEN'S SHELTER, LONDON





WORK BY THE COUNTESS OF ABERDEEN

them is a St Augustine beauty in full skirt and lace mantilla; then a colonial maiden, a miss of New Amsterdam, a New England dame, a Puritan and a quakeress, a New York woman elegantly attired in silks and furs, a matron of revolutionary times, a balloon-like figure of the era of the civil war, and the fashionable dames and damsels of the present day.



CATHOLIC VESTMENTS

are heirlooms descended through many generations, some of them articles the secret of whose manufacture is known only to the royal household, and others samples of varieties which the queen is introducing among the women of Italy, reviving an industrial art that was well nigh lost. The pavilion is furnished in the style of the fifteenth century, the furniture and the iron gate at the entrance, of delicate lace-like workmanship, being made in Venice. Within the court is a lay figure,

grass and millet seeds, while in the construction of the large picture known as *The Water Carrier*, the native grasses and grains are used.

In the main hall-way of the northern wing, opposite the exhibit of the Turkish Compassion Fund, is a case containing quaint, doll-like dummies attired in female costumes. This is a loan collection by New York women, the figures portraying women representative of American history, from the early Spanish to the present times. Among

In the south wing, the Spanish pavilion occupies the post of honor, in the centre of other foreign exhibits, the collection illustrating many of the activities of women in the line of art industry, whether residents of Spain or Spanish-American countries. The display of woman's handicraft embraces specimens of needle-work, knitting, crochet-work, lace-making by hand and loom, plain and colored embroideries, tapestry, embossing, fine and coarse domestic cloths, and other textile fabrics peculiar to each section of the country, so arranged as to form a historic collection, this idea forming the motif of the design. The work of women is further illustrated by articles suggestive of their labors in the government tobacco factories, and in the culture of silk. Many of the choicest samples are from industrial institutions under government auspices, and from those established for the education of the deaf and dumb.

Separated from the Spanish section by the Japanese division is the pavilion of Italy, the royal laces of the house of Savoy, never before displayed in foreign lands, forming the nucleus of the exhibits. For their safe keeping and return a bond was required from the government of the United States, and then by their owner, Queen Marguerite, they were placed in charge of a detachment of royal marines, with the countess di Brazza specially instructed to see them safely housed within the pavilion; for these



AUSTRIA



engaged in making lace, with choice specimens of bridal veils, of Burano, Genoese point, and Sicilian and Venetian laces. Of all the queen's treasures there are none more highly prized than the bed-spread under which Victor Emanuel was born. Finally the collection serves as samples of the work which is now being done by the poorer classes of the kingdom, and many of the pieces on exhibition are from those who receive instruction at the schools of Burano, of which the queen is president. Much valuable information was collected by the Italian commission as to the ancient history of textile arts, and especially of lace-making, all of which is conveyed in the form of books and photographs.

Japan presents in her two chambers a dainty picture of the industrial and domestic occupations of her women, one representing the boudoir of a lady of high rank, and the other a library. In the former are all the articles of toilet used by the wives of the daimios, or feudal lords of olden times, specially prepared for the purpose. In the library is a collection of miscellaneous articles, including stringed instruments, mats, screens, banners, a case of books, a writing table, and other appropriate furnishings. There are also oil-paintings, pictures in relief, carvings in ivory, cocoons, raw silk, embroideries, crinkled textures and crapes, hand-woven tapestries, laces, cloissonne, enamel-work, china-ware, lacquer work and artificial flowers. The empress, the empress-dowager, and the princess Mori all took an active part in the organization of the Japanese exhibit. By the first were contributed choice specimens of raw silk; by the second, fabrics woven in her own palace, while the princess, as president of the Japanese commission, also gave her cordial support.

To the French section in all its completeness, Parisian milliners and glove makers contributed their daintiest conceptions. D'Alencon, Chantilly, and French point-laces fill several cases, and there are complete trousseaus for matrons, young girls, and infants, with handkerchiefs, fans, and parasols such as only the French can make. For the display of several elegant costumes by a Parisian house is provided a model drawing-room, in which a tea-party is in progress. The walls are covered with tapestry, and at the table of antique design presides the hostess, attired in a gown of brocaded satin trimmed with lace. The evolution of the art of dress is represented in a large glass case filled with dolls, or other miniature reproductions of famous women: St Clotilde, wife of Clovis; the royal dames of Francis I and Henry IV; the Medici, Marie Antoinette, and many other historic characters are here represented with singular fidelity, the details of dress being copied from portraits of the originals.



JAPAN



CEYLON PAVILION



NAVAJO INDIAN WORK





GERMANY

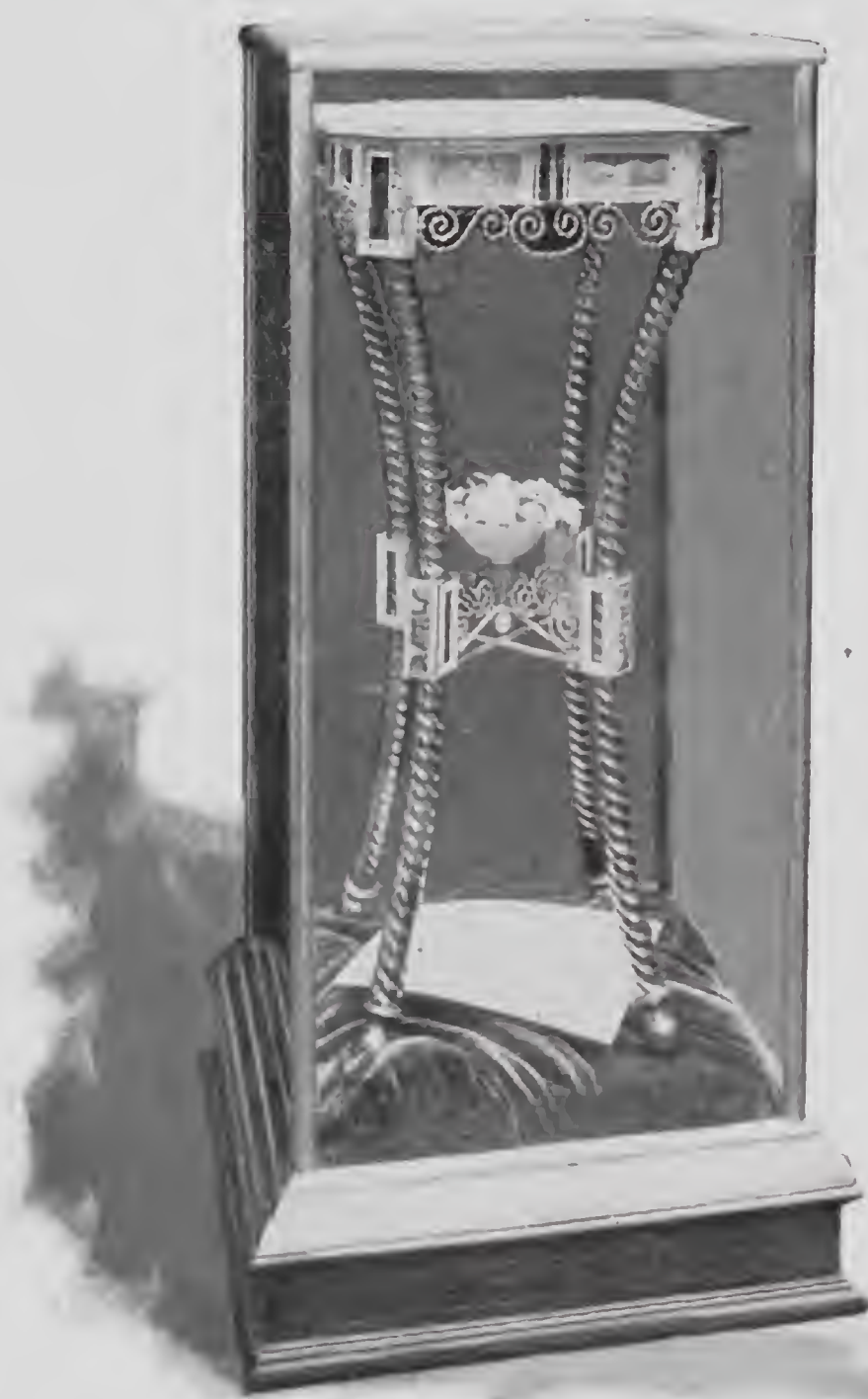
Between the French and Spanish sections are those of Mexico, Norway, Sweden, Siam, and the cape of Good Hope. The rich specimens of needle-work, in gold and silver, from the women of Siam, with many other samples, appear almost side by side with the industrial products of the peasantry and societies of Sweden. In the shape of a church window is a beautiful specimen of stained glass, the Swedish saint, Bridget, forming the central figure, and in the hall of the rotunda is a historic collection of engraved medals and bronze reliefs, contributed by a lady of Stockholm. Norwegian women display articles of needle-work, wood-carvings, and feather mats, through an Illinois industrial society whose members are of this nationality. A native woman on snow-shoes, with a basket of shells on her arm, stands at the entrance to the booth, and in the model of a Norwegian cabin are grouped figures of peasant girls in holiday, bridal, and every-day attire, with city ladies in more elaborate costumes.

Soon after the Russo-Turkish war, Kate Marsden, an English woman and nurse of the Red Cross society, journeyed east to Siberia for the purpose of founding leper missions, and near the Swedish and Norwegian booths is a model of the village which she established in the province of Takutsk. It consists of two hospitals, a school, a church, houses for lepers, and their attendants, and workshops for those who retain the use of their limbs. Fronting the models, is a miniature of one of the miserable hovels in which she found a number of unfortunates lurking in their forest lair. In an adjoining booth the women of the cape of Good Hope display in neat designs their native grasses, shell and feather work, with musical instruments, brooms, pottery, and filigree work of Kaffir production, and figures of Bushmen in full dress.

Mexico has a large and tastefully arranged exhibit. In the centre of her section are several cases filled with fancy-work, including artificial fruits and flowers, and fashioned in blossoms and twigs



FROM FIBRE OF CENTURY PLANT AZORES



ONYX TABLE OF NEW MEXICO



BELGIAN FABRICS









RUSSIAN SECTION





NEW YORK ROOM, WOMAN'S BUILDING

the woman's society of Baden, with its numerous branches, is illustrated its methods of training young women and caring for dependent children. Photography, drawing, cooking, printing, laundry work, book-keeping and art industries, are taught in establishments connected with the Lette society, and embroideries, drawings, sewed garments, printed books, artificial flowers, photographs, and other articles are displayed as specimens of the pupils' work. Special courses in dress-making, as taught at various institutions, are illustrated by text books and paper models, while of domestic economy there are most interesting expositions. The committee which had the latter department in charge provided not only printed volumes bearing on the subject, but models of kitchens, cooking schools, and institutions for the education of servants and housekeepers. Samples of work produced by various charitable institutions, with a presentation of the professional labors of nurses, are also found in the German section, in the centre of which is the display of the Lette society, and above it a bronze bust of its founder.

Returning to the gallery floor, we find there, opening on the eastern and western corridors, the various committee, assembly, and reception chambers, whose decorative features have already been



WOMAN'S LIBRARY



described, together with the library and the exhibits of the British training schools. The northern section is occupied by the assembly room and the model kitchen, and on the south is the organization department, where are the headquarters of the industrial, educational, religious, and other associations of women. The space set

apart for this purpose, including nearly 12,000 square feet, is divided into more than sixty compartments by rails and curtains of blue silk, corresponding in color with the tints of the frescoed walls, and forming the only lines of demarcation between the exhibits of the various societies, thus giving to the entire collection a social and cosmopolitan aspect.

The largest area is occupied by the Woman's Christian Temperance union, representing more than 200,000 active members. On their walls are the banners of many local organizations, with portraits of such leaders in the cause as Frances Willard and Mary Clement Leavitt, the latter the first missionary to travel



around the world for the purpose of organizing societies in the interests of temperance and social purity. Here is a monster petition to which are still being added the signatures of men and women in every portion of the earth; also a huge globe covered with the cards of four million children living in forty-four countries who have taken the pledge of total abstinence. A corner of this section, decorated with Japanese designs, and containing a large pendent bell composed of discarded opium pipes, calls attention to this branch of the reform, earnestly prosecuted by the union in Eastern countries. The booth is handsomely equipped, and in its exhibits is sufficient evidence of the world-wide progress of the cause.

Adjoining this section is the booth of the Chicago Woman's club, whose membership includes many earnest workers in charitable, intellectual, and reformatory movements. Near by are the headquarters of the International board of the Young Woman's Christian association, whose central offices are in St Louis, and whose special object is to watch over the interests of young work-women. Among the homes erected for such persons, as shown by illustrations, the one in New York city is on the largest scale. From the forty branches of this association come exhibits of class work, and over each is the sign of the order, in the form of an ivory-tinted shield, finished in threads of blue and gold.



WOMAN'S LIBRARY



The booth of the order known as the King's daughters, whose silver cross has been carried into many far corners of the earth, is tastefully decorated with festoons and banners of purple, silver, and white. The order of the Eastern Star, an auxiliary to that of Freemasonry, unfurls a banner of black satin lettered in gold, and a symbolic sheaf of wheat. Its quarters are luxuriously furnished, with carpet of moquette, couches, and easy chairs.

Without attempting to follow any special order of procedure, attention may be called to the work of several associations, as illustrated in this department. Home and foreign missionary societies occupy a considerable space, the latter displaying many curios gathered in connection with their work.

Chinese women exhibit a banner of blue, gray, and gold, in honor of their American friends. A Japanese woman sends a robe, later to serve as her burial shroud, and over which are scrawled the blessings and consecrations of native priests. Converted heathendom has also contributed to the collection a Turkish prayer roll, and a Buddhist rosary.

There are here represented associations for the rescue of fallen women; and by one known as the Girls' Friendly society, under the auspices of the episcopal church, is illustrated the work



that it is doing, with a view to the protection of girls whose calling exposes them to temptation. In the booth of a Philadelphia society, whose members, excluded by sickness from contact with the world, console each other by messages sent through an official organ; in that of a Philadelphia home, whose purposes are revealed in its pictures and stories of crippled children, and in the quarters of the Woman's relief corps of Kansas, is shown what is being accomplished for the aid of those suffering from physical ailments.



CORNERS IN CINCINNATI ROOM

Seventeen unions and a very large membership are represented in the exhibits of the Woman's Educational and Industrial association. Female suffrage is symbolized in various devices, as on the azure ground of the American flag, with the great star of Wyoming, and the smaller symbols of Kansas and Michigan. There is also the irrepressible figure of Susan B. Anthony, in bust and portrait form, and in the shape of souvenirs. In conclusion much may be learned in this department as to federations and councils of women, industrial institutes, schools for needle-work, flower missions, ceramic clubs, and literary, scientific, and philanthropic organizations, all of which find expression among these collections. Results are further illustrated in a book of statistics, compiled under the direction of the Board of Lady Managers, giving the names and membership of the different bodies, with the number of women employed in every branch of work, thus enabling the visitor more fully to appreciate the significance of the display.



The walls of the staircases and a few of them of oriental designs many portions are tasteful which attracts general attention, noted for its beauty associations, is a famous Norman tapestry-hall of Bayeux, of a strip of linen, 200 two in width, with figured, depicting career of William the his departure from vasion of England. As fashioned by his wife, Matilda; little doubt that the tapestry whose events it depicts. The copy ridor, where also are the national costumes to various provinces, with the dress grasses and wisps of hay, and yet said to be water-proof. In the north-eastern section of the gallery are the pictures contributed by Queen Victoria, and the princesses Christian, Louise, and Beatrice. In the northern corridor, from which open the large assembly room and model kitchen, is a chair of state from the Mexican government, and some rich tapestry work from London, and on the opposite side is a choice collection of French artistic embroidery.

A favorite resort in the Woman's building is the model kitchen, with floor of tiling, its gas cooking-range and

modern utensils, all scrupulously clean, and in the neatest order. During the sessions of the classes in cookery are submitted for the approval

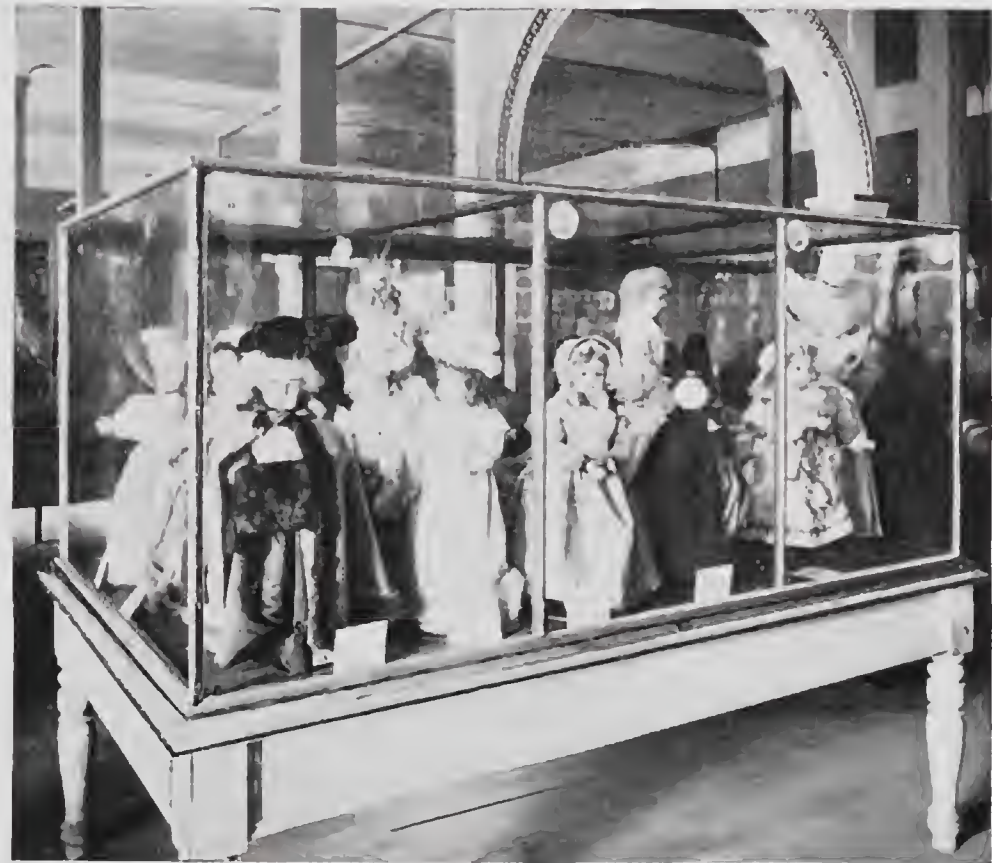
of visitors specimens of their culinary skill, among them the lightest of muffins, corn-starch, and so-called Indian puddings. The kitchen is under the direction of Mrs S. T. Rohrer, of Philadelphia, by whom were recently introduced in European countries, in conjunction with a government agent, all the various products of maize; and to illustrate the many uses to which those products may be applied is one of the purposes of the exhibit. Some of the recipes were furnished by an agent of the Smithsonian institution, who procured them while living among the Zuñis.

The Woman's library, furnished by the

vestibules are adorned with tapestries, not sign, and of the galleries themselves fully embellished. A work attention, but one less than for its historic production of the try contained in the The original is formed feet long by less than ures, worked in colored various episodes in the Conqueror, including Normandy, and his in-tradition relates, it was but be this as it may, there is was made during the years forms a border for the eastern costumes of Spanish women, belonging of a mountaineer, made of long gallery are the



CEILING, WOMAN'S LIBRARY



HISTORICAL COSTUMES, NEW YORK EXHIBIT



DECORATIVE WORK, MARYLAND



ART FANCY WORK, BUFFALO





CHICAGO ART WORK

John Boyd Thacher, forms one of the attractions of the library. Another is a cabinet containing forty-seven different translations and editions of *Uncle Tom's Cabin*, in front of which stands a bust of Harriet Beecher Stowe. An oil portrait of Mrs Sigourney and two leaves from her diary accompany the Connecticut books. Other American authors are also represented.

At either side of the library proper are the halls of Record, their walls covered with diagrams, charts, and tables containing much information as to the number of women engaged in the

women of New York, the ceiling decorated by Dora Wheeler Keith, contains some 7,000 volumes, written by women of every nation, and collected by committees in many states and countries. More than twenty-five nationalities are here represented in more than twenty languages, their dates of publication varying from 1587 to 1893. New York sends the largest collection of any of the states, France of the foreign countries, Great Britain and Spain the greatest number of rare books and manuscripts, the last a loan from the Biblioteca Nacional in Madrid. Some nations and states have sent also photographs and biographical sketches of their authors; others, as Sweden, bibliographies of the women of their country, and still others, as Connecticut and New Jersey, have printed handsome volumes containing representative articles from periodical writers, all prepared expressly for the occasion. New York's collection of club papers and periodical articles is type-written, and a marvel of completeness and mechanical execution. Nearly all these works are intended to form the nucleus of an international woman's library, to which additions will be constantly received. In the form of a card catalogue statistics have been prepared as to the career, education, and public work of each author, and when printed, will form a valuable biography of women.

A collection of autographs and portraits of women of France, Great Britain, and America, the property of Mrs



HOSPITAL AND PHARMACY



MRS. MCKEE'S INAUGURAL BALL DRESS, INDIANA

professions, their ratio of savings, mortality, and emigration, with other phases of their condition and career. In the corridors adjacent is an exhibit organized by prominent New York families, consisting largely of historic embroideries, miniatures, watches, snuff-boxes, fans, and laces.

But in the corridors the main attraction is the Keppel historic collection of engravings and etchings by women who have won repute in those branches of art. Among the first in chronological order are the plates engraved by Diana Ghisi of Mantua, between 1581 and 1588, most of them copies from Raphael, Tuccari, and Giulio Romano. France, Italy, Germany, and





CALIFORNIA ROOM

England all furnished skilled female engravers and etchers to the world of art, from 1535 to 1835, and specimens of their work are here on exposition. Many of them were the pupils of male relatives who had previously made their mark, and among them were Angelica Kauffman and Caroline Watson, the former a Swiss whose works were chiefly produced in England, and the latter engraver royal to Queen Caroline. Finally in the form of a bust is a wood-cut by Marie de Medicis, bearing the date of 1573.

South of the library is the exhibit of the British training schools for nurses, the walls hung with portraits of women who have been leaders in the work, and with busts and statues of others scattered throughout the apartment. Under a portrait of Queen Victoria is a statue of Florence Nightingale, and near it a bust of Princess Christian, president of the Royal British Nurses' association, with a statue of Sister Dora, and a bookcase containing her keys, scissors, chains, and other personal effects, such as remind us of her devotion and self-sacrifice. In a word, there is an entire gallery of celebrities, not least among which is the figure or bust of Rother, the founder of saint Bartholomew's hospital in 1122.

In large glass cases are the exhibits illustrative of methods and appliances, among which are ligatures and bandages, thermometers for marking the temperature of fever patients, surgical dressings, ventilated corsets, hygienic shoes, and other articles of wear for the sick. District nurses and private nurses have their separate

outfits, as here illustrated, and in the ward baskets are most ingenious contrivances for packing articles into the smallest space. In the oil-silk bags of Queen Victoria's jubilee nurses are stowed the cordials and medicines with which they relieve the poor. Models of apparatus used in medical and surgical treatment, designed by an employé of a homœopathic hospital, form an interesting though painful study. The dainty lace caps worn by English nurses, the medals, badges, and decorations awarded for distinguished service in war and pestilence, and the models which represent the costumes worn in various hospitals, are also among the collection.

Adjoining the exhibit of nurses' schools is a room which contains the overflow from the New York collections. It consists of articles donated by colored women of that state, and was organized by a colored female commissioner who well represents the capabilities of her race. In one corner is jewelry made by the natives of



SHIELD OF COLUMBUS



CALIFORNIA ROOM



PELICAN CAPE, NEW ORLEANS





FANCY WORK AND DECORATIONS

West Africa, and elsewhere, specimens of cabinet work decorated in designs burned into the wood, with artistic embroideries, fans, and laces, and pictures in oil, water colors, and crayons. In the covers of a plush album is shown a sample of the first book-binding done by colored women.



PAINTED CHINA

Scattered throughout the Woman's building are striking illustrations of the revival of art needle-work, which in the middle ages was almost the only industry that occupied the minds and hands of women. In this modern revival, which is of comparatively recent date, England and the United States have taken the lead, and in this connection may be quoted a few extracts from an article contributed to the *Art Amateur* by Mrs Candace Wheeler, director of the department:

"The old and familiar art of needle-work, the art which began when Eve sewed fig-leaves in the Garden of Eden, the art which has been the heritage of Eve's daughters in all ages of the world, has never in history made so great a showing or illustrated so conclusively its claim to rank as one of the great arts of the world. The needle-work of all the ages is here—stitchery which goes back to the time of the Beauvais tapestry, that historical treasure whose archaic story-telling renders it too precious for presence even in the wonder-time of the Columbian Exposition, and makes a reproduction of it a thing of national value. There are embroideries which are precious from every point of view—from their antiquity, and the human interest which therefore attaches to them; from their methods, which have long been lost to the art; from the use of materials of a purity and preciousness almost unknown to modern manufacture, and from a color the subtlety of which only the painting of time can give, and which no dyes can rival. These qualities give a many-sided value, which dwarfs



FANCY WORK



EMBROIDERY, CHICAGO





OLD SPANISH CHAIR



A ROYAL PRAYER BOOK

The grotesque and wicked fancies of some of the miraculously wrought Chinese embroideries of the same date make these seem like holy pictures of madonnas and saints, although no hint of figure is shown in the design. Convent embroideries form a class by themselves, belonging for the most part to the Italian school, and covering a large part of the lustrous, softly colored, and reverent needle-work of the fifteenth and sixteenth centuries in Italy. They are among the most attractive of all the antique pieces shown in the Columbian Exposition, and deserve almost individual notice and description."

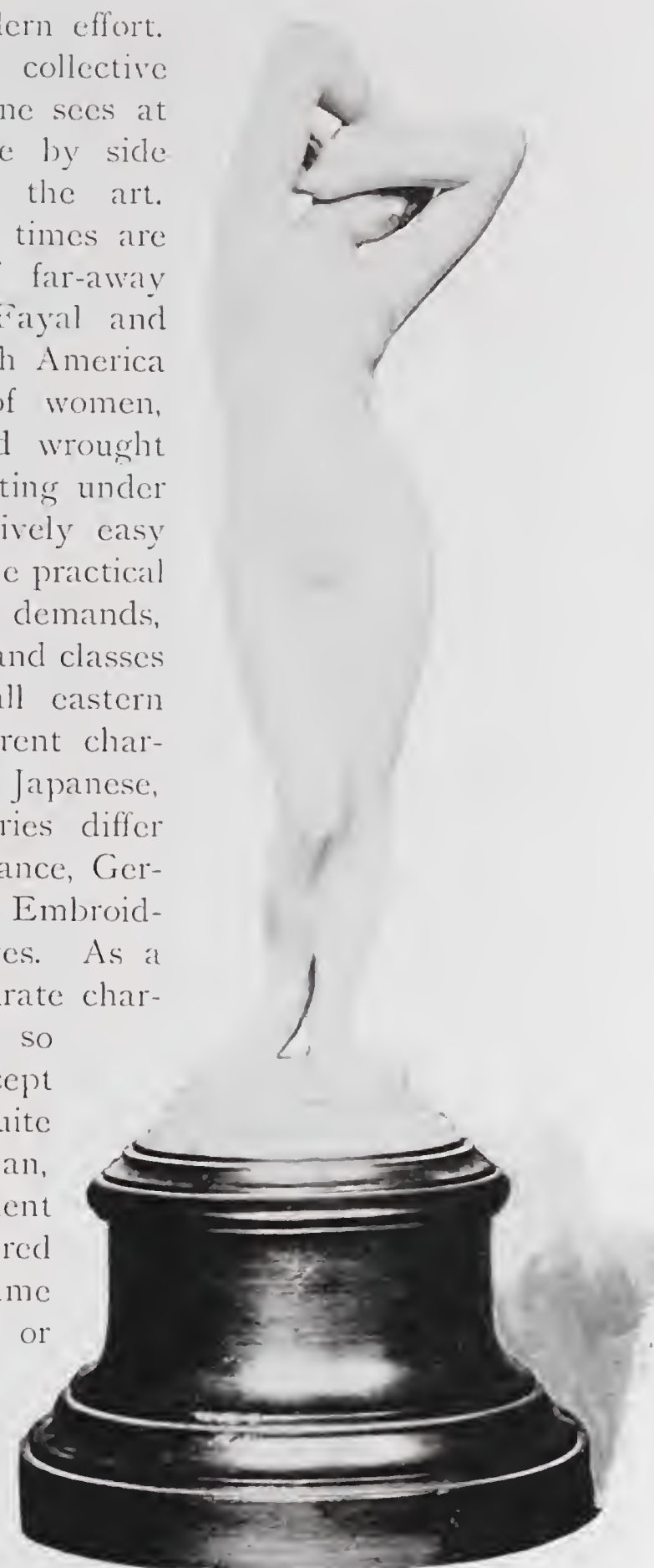
even the best and most earnest of modern effort.

"The first impression of all this collective wealth of embroidery is bewildering. One sees at a glance, almost, the first attempt side by side with the very latest development of the art. Examples of all countries as well as all times are here—of India, China, and Japan; of far-away Persia; of Russia and Roumania; of Fayal and Ceylon; of Greece and Arabia; of South America and Mexico—the work of all races of women, wherever they exist or have existed, and wrought out their quiet days with the needle, sitting under palm and pomegranate. It is comparatively easy to mark the great divisions; but even to the practical observer schools and countries, uses and demands, have widely differentiated the methods and classes of these divisions. What we broadly call eastern work will be found to have very different characteristics and features. Chinese and Japanese, Persian, Indian, and Turkish embroideries differ from each other as do those of Italy, France, Germany, England, and Northern Europe. Embroideries of all periods characterize themselves. As a rule, eastern productions keep their separate characteristics through succeeding periods, so that it is difficult to fix their dates except approximately, and by condition or by quite obvious effects of time. Ancient Persian, and comparatively modern Persian, ancient Indian, and Indian embroideries of a hundred or even of fifty years ago, have the same style and methods, and use the same or nearly the same materials. Chinese, Japanese, Egyptian, and other Eastern peoples have scarcely changed their subjects or methods in a thousand years.

"Most of the antique embroideries of Europe are found in the shape of altar hangings and vestments, for in

the embroideries, as in the pictorial art of the early centuries, the Church was the great patron. Many of them were wrought in nunneries, and, in fact, could not be produced except in the quiet and uneventful life of the cloister, where color and stitchery made the one interest and contrast of colorless lives, and could therefore almost monopolize the thought of the inmate who produced them. There is certainly a peacefulness and repose of subject and treatment in these convent-wrought hangings

very greatly in contrast with other embroideries.



PHRYNE, IN SIXTEENTH CENTURY IVORY



FRENCH ART





TAPESTRY

Through the efforts of the Board of Lady Managers was built and furnished the Children's home, on ground adjoining the Woman's building, and forming of itself one of the educational features of the Fair. While intended mainly for the care of children too young to wander through grounds and buildings in company with parent or guardian, it is also in the nature of an exhibit, or rather of a series of exhibits, displaying the best of our nineteenth century methods of rearing and training children. First, may be mentioned the model crèche, whose quarters are in a spacious,



FRENCH COAT OF ARMS GOLD AND VELVET

airy, and well lighted chamber, and where are shown from the earliest stages of infancy, the cradles and children's clothing of every age and nation, with the garments best suited in pattern, and material to the health and comfort of the child, and with brief lectures on these and kindred topics. Here, at a nominal charge, children are fed, amused, and cared for, the babies in an adjoining nursery, and older children according to age and conditions. In another apartment is a play-room suitably equipped, and there is a dining-room, kitchen, laundry, and drying room, all conveniently arranged.

Then comes the kindergarten, furnished and managed by the International Kindergarten association, with modern apparatus, and with object lessons of value not only to children but to those intrusted with their care, whether as mothers or teachers. In connection with the kindergarten is the kitchen garden, where, by the founder of this system, pupils are instructed in cooking, and other household work, but in such interesting method that their labor is one of pleasure. There are also classes in physical culture, a gymnasium, an assembly hall, a children's library, and a special department, equipped by the women of Pennsylvania, where may be observed the process of imparting to deaf mutes the faculty of speech.

The gymnasium in the centre of the interior court is furnished with dumb-bells, bars, swings, vaulting horses, and other appliances for the physical education of children. In cases and on stands around the gymnasium is a large collection of toys of many varieties, from those

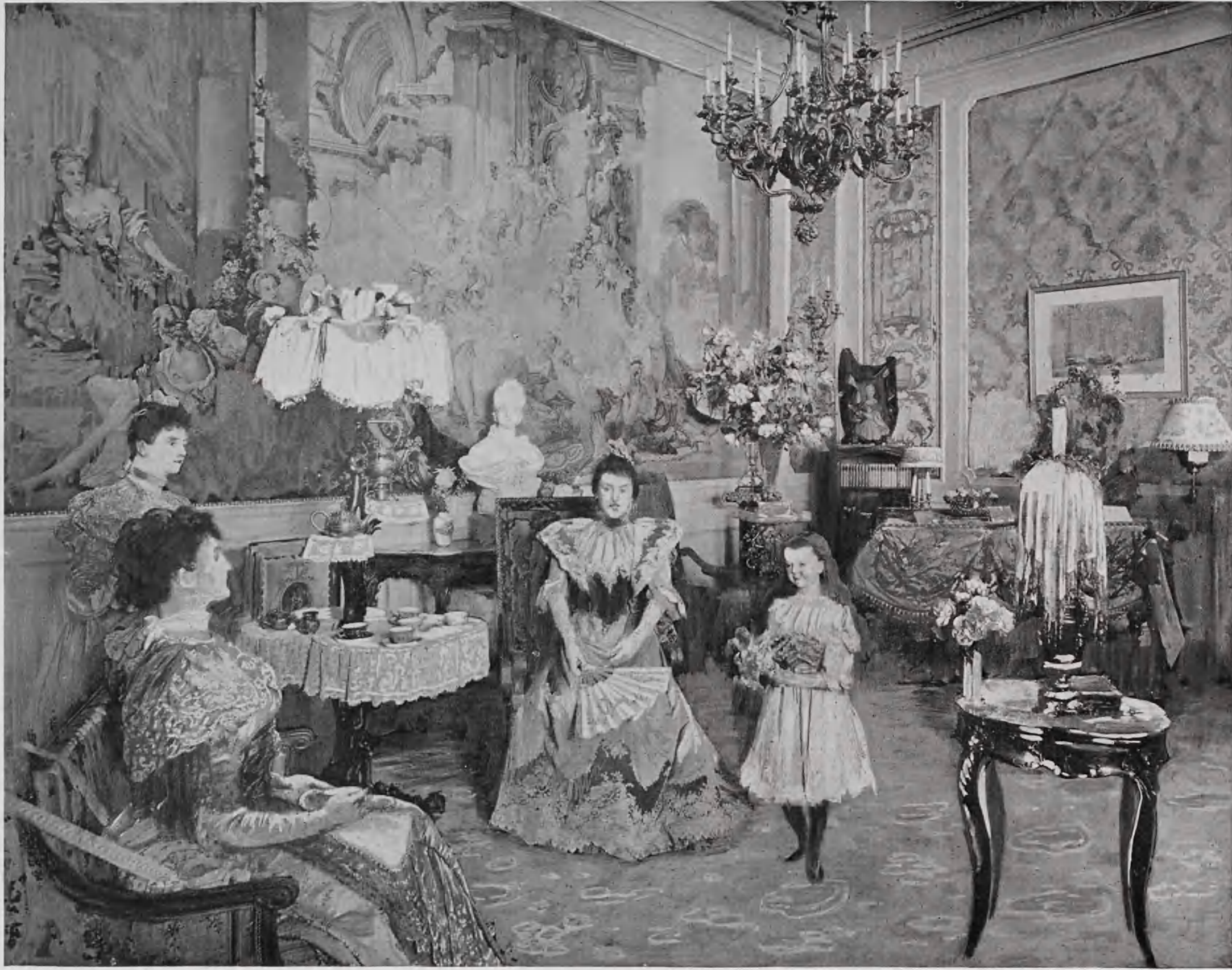


QUEEN AND PRINCESS OF DENMARK EXHIBIT



FRENCH RECORD ROOM





FRENCH SALON



SÈVRES WARE



FRENCH RED CROSS EXHIBIT





SWEDEN'S EXHIBIT

of ancient and savage nations to the most recent devices fashioned for the amusement and instruction of childhood. There are the Punch and Judy and Mother Goose of England, shaggy-haired dogs from Russia, dolls and furniture from France, kite lanterns from China, and on the second



FRENCH LACES

floor, Japanese models of acrobats, and domestic gods, with samples of articles used in various national games. An elaborate display represents a child's Christmas in Spain, with models of lordly castles and humble cottages, tiny figures of children engaged in the festivities of their country, and a wide expanse of miniature landscape. At one of the entrances is an Indian wigwam filled with native toys, and at another kindergarten literature, and a book composed of autographic inscriptions dedicated to children, among them contributions from Oliver Wendell Holmes, Canon Farrar, the Shah of Persia, George W. Cable, and Rudyard Kipling.

For older children more solid entertainment is provided in the assembly hall, where are lectures or talks on various topics, and especially on foreign lands, as represented at the Fair, many of them illustrated by the stereopticon. Then, under proper care, they are permitted to view the collections of which the lecture treats, and thus to compare what they have heard with the exhibits of the country described. The outer walls of the library are covered with the sketches and manuscripts of authors who have made juvenile literature a specialty. To these and to the collection of books, selected and arranged with reference to age and capability, some of the publishing houses contributed. Of magazines and periodicals, principally American, English, French, and German, there is also a large assortment.

In one of the apartments instruction is given in the arts of wood-carving and clay-modelling, and in another is illustrated the process of teaching the deaf and dumb. In the latter children four or five years of age are taught to observe the movements of throat and lips, and the expressions of the face, in the articulation of words; for it is the theory of their instructors that, if taken in time, no case



WELSH SPINNING

is hopeless, unless there exists some physical deformity of the mouth. There is also a room where the Ramona Indian school, of Santa Fé, New Mexico, displays its methods of teaching native children, a class of girls furnishing the living material for the illustration. The school was named after the novel written by Helen Hunt Jackson, and was partially



BABY RUTH'S PRESENT FROM SWEDEN





WEST ENTRANCE TO WOMAN'S BUILDING





INTERIOR CHILDREN'S BUILDING





GALLERY PAINTINGS

modelled in accordance with the theories therein advanced. On the gallery floor Charity is represented in this sphere of her mission by a group in marble from the atelier of Lorado Taft, a woman on bended knee parting in tears from her child, which nestles in the arms of the central figure, as with words of cheer and comfort she bids adieu to the sorrow-stricken mother.

As with the entire display of Woman's industry and art, so with its Children's home, we have here a feature of the Exposition, of general, as well as of special interest. Just as the manufacturer, the machinist, or the electrician may study in their several departments the highest achievements of the inventor or the mechanic, so may all classes of visitors observe in the Children's building the most improved and enlightened methods for the rearing and education of children. In its crèche, its kindergarten, its kitchen-garden, its playground, gymnasium, library, assembly-room, workshop, furniture, and even in its toys, are illustrated the best and most recent appliances and methods which our nineteenth century civilization has evolved for the training of those who are soon to take our places in the arena of life, now demanding, as never before, that he who enters the lists should be fully equipped for the struggle.

Beginning with the crèche, where, in an airy and cheerful apartment, are shown the most rational modes of dressing and caring for young children, there is placed before us all that conduces to physical, intellectual, and moral development, all that expands child-nature and

gives to child-life a healthful and vigorous growth. In the kindergarten and kitchen-garden are object lessons of practical value to mothers and teachers; the former a play-school where instruction is conveyed in entertaining form,



POTTERY EXHIBITS



SIAMESE PAVILION



SCREEN, SIAM



FANCY WORK



and the latter also a place of recreation where young girls take a pride and pleasure in learning the art of housekeeping. So with the school for sloyd, with its exhibit of wood-carving, and the classes for physical culture, in connection with the American Turner-Bund. The library is also a most attractive feature, with its tasteful and comfortably furnished room, its books and periodicals from many lands, and in many languages. To gather this collection was of itself a task of no slight difficulty, for publishers refused, as a rule, to contribute, overburdened as they were, with solicitations from other quarters. But the managers were equal to the occasion, and addressing letters to American and European writers in the line of juvenile literature, thus secured, as a nucleus, a large number of authors' copies and autographs. To these, many others were added, including illustrated works, magazines, and newspapers, manuscripts, sketches, photographs, prints, and portraits. All these were selected, as far as possible, from the standpoint of the child, and not of the adult, such works being placed on the shelves and tables as children loved to read, and not as their elders might wish them to have.

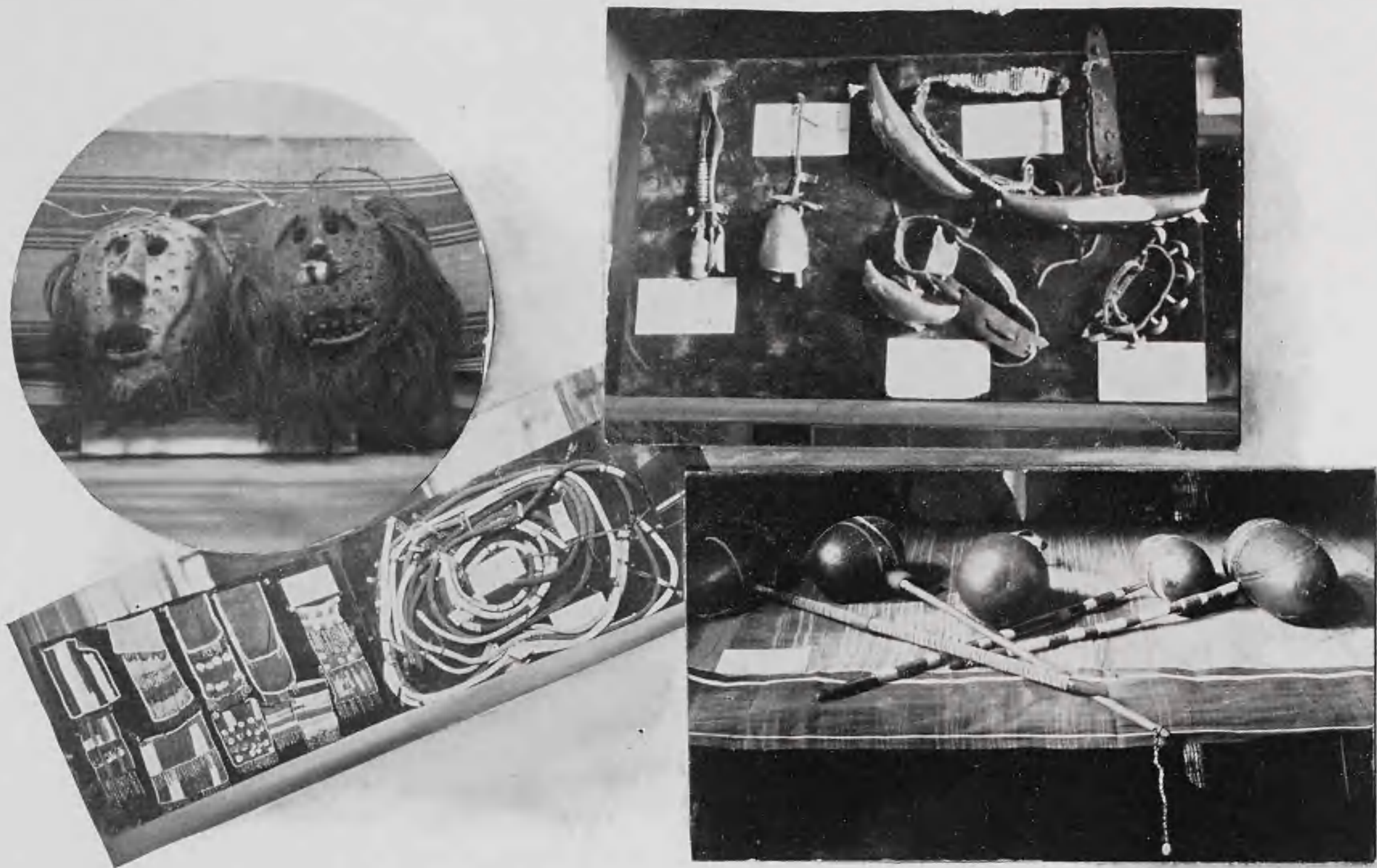
Such is one of the many good works that the Board of Lady Managers has accomplished, and this it has done through its own unaided efforts, formulating its plans, erecting and furnishing its building, and raising the



SCHOOL CLASSES, CHILDREN'S BUILDING

funds entirely through its own exertions, for by the Exposition management not a single dollar was appropriated for the purpose, this not from indifference but because not a dollar could be spared from its treasury. To get together this Children's home that nestles almost under the eaves of the Woman's edifice, was in truth an undertaking that taxed to the utmost their already overstrained resources; but it was to them a labor of love, and in the gratitude of thousands of children, of thousands of mothers, in the unspoken but none the less heartfelt sympathy of millions of visitors from every quarter of the world, they have found a just reward. Says one of the contributors to a recent work on the Woman's department, written by members of the board or by those who have their cause at heart: "It has been at a great outlay of time and strength that the money for the Children's building has been raised and judiciously expended; but no one of the many workers who have contributed these building materials, time, and strength, have grudged the costly sacrifice they have made. We believe not only that the children who enjoy our building's hospitality will be benefited by our work, but that the children in every state of this republic, in every country of the world will directly or indirectly profit by it, and in this

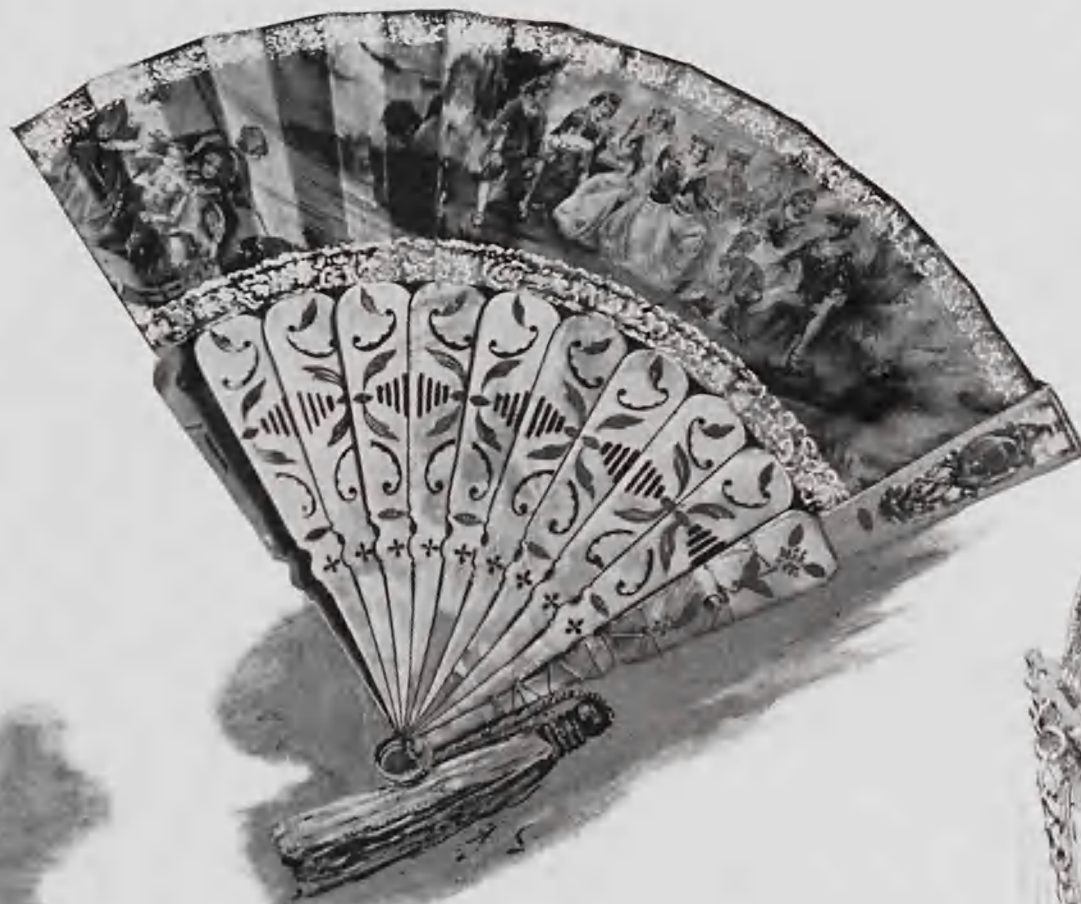




MRS. FRENCH-SHELDON'S AFRICAN EXHIBIT, WOMAN'S BUILDING



FRANCISCAN COPPER CENSER



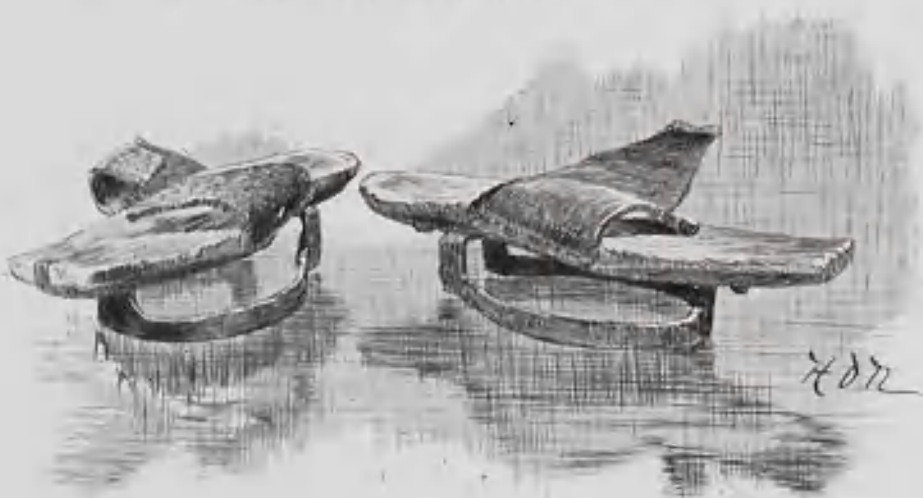
COLONIAL FAN



MILES STANDISH RELIC



IRON AND SILVER SPURS OF WASHINGTON AND BURGONYNE



PATTENS 200 YEARS OLD



RELICS ROGER WILLIAMS

LADY MANAGERS' COLONIAL EXHIBIT, GOVERNMENT BUILDING





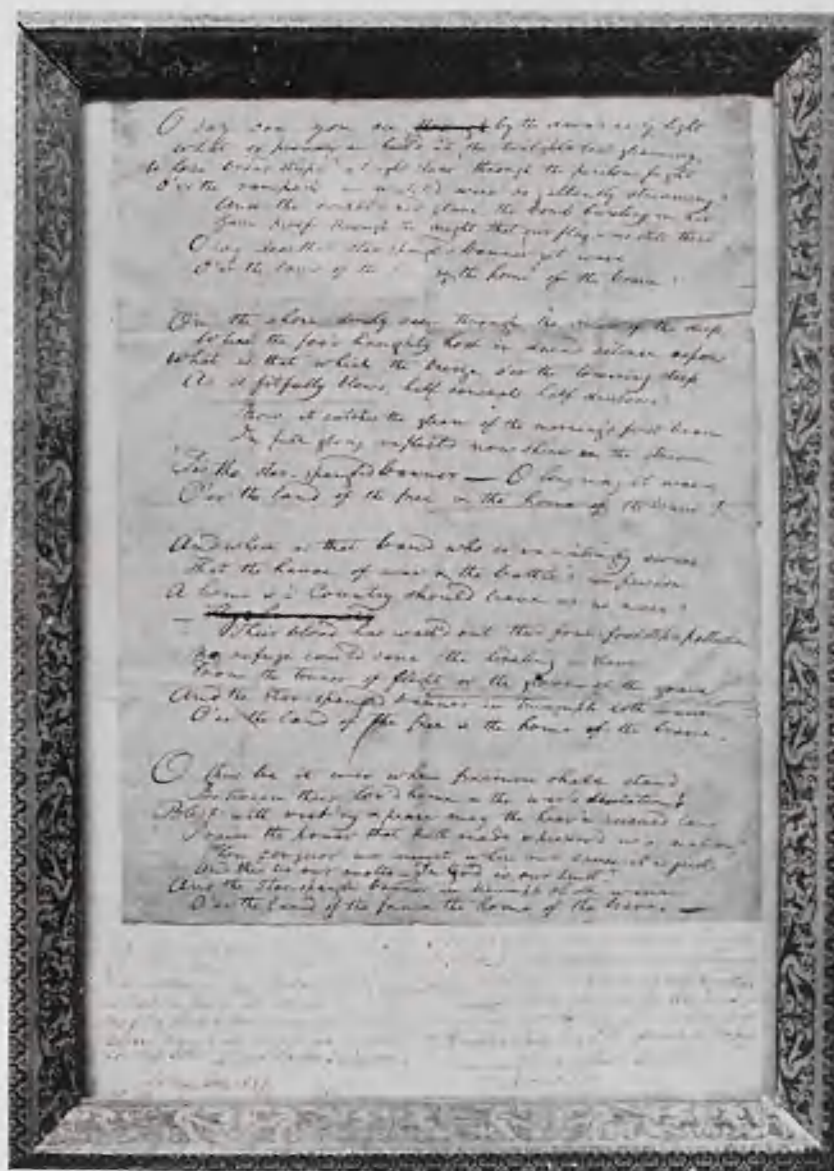
PROVINCIAL SEAL OF NORTH CAROLINA



MORAVIAN COLLECTION, 1760



COMMODORE PERRY'S PITCHER



MANUSCRIPT STAR SPANGLED BANNER



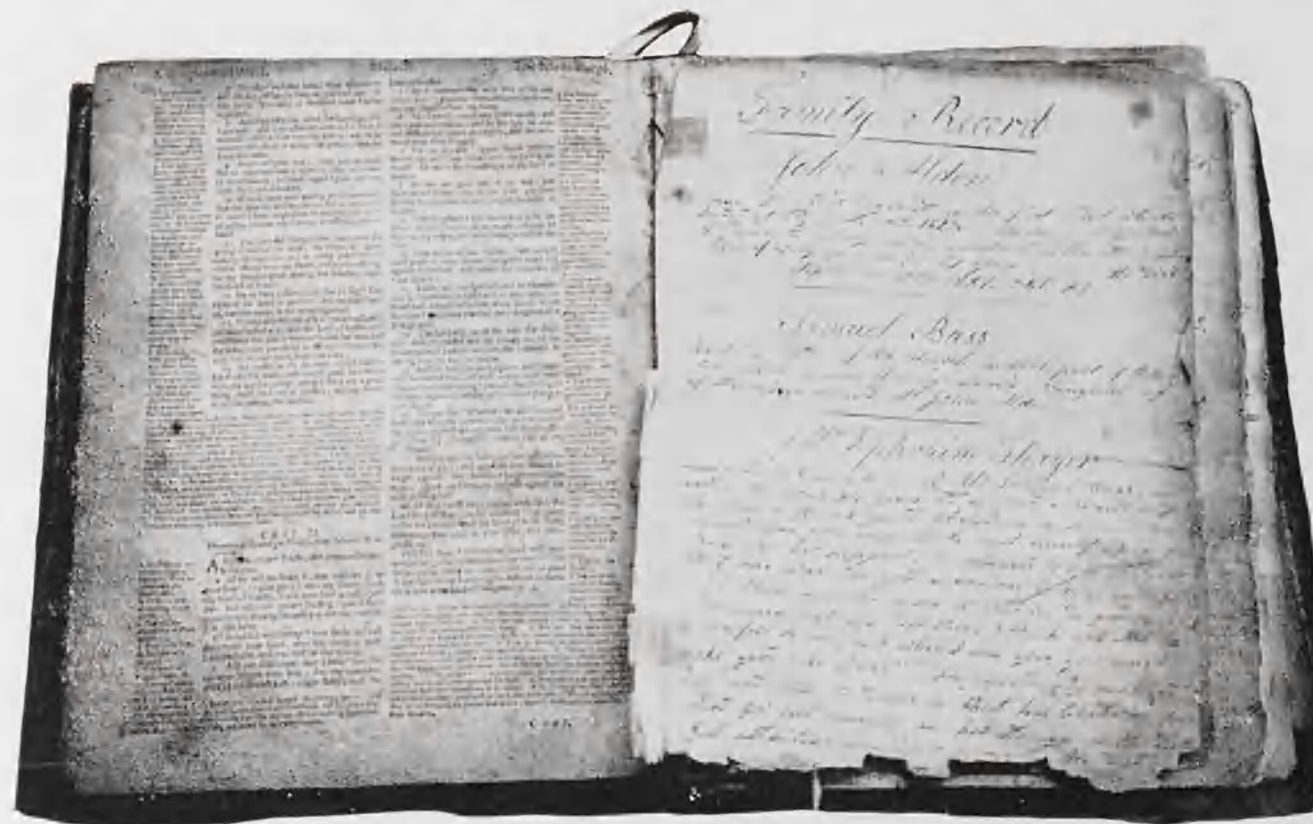
GREEN SILK UMBRELLA, FIRST BROUGHT TO AMERICA



CREAM PITCHER, LOVING CUP, AND TEAPOT



ELLERY RELICS AND CANDLESTICK USED BY WASHINGTON



JOHN ALDEN FAMILY RECORD



THE VERNON HOUSE

LADY MANAGERS' COLONIAL EXHIBIT, GOVERNMENT BUILDING





KITCHEN GARDEN, CHILDREN'S BUILDING

branch of human endeavor, where is felt the all-pervading influence of woman's hand, and heart, and brain. Never before has been offered to the world; never before has been attempted so full and exhaustive a representation of feminine achievement, and capability. And especially do these collections illustrate the progress in this direction of the United States; for nowhere else have the disabilities of women been so largely removed; nowhere does woman play so prominent a part as a bread-winner, as a competitor with man in the several vocations wherein she is fitted to compete.

If in the United States the number of bread-winners is smaller than among European nations, it is because there is less need for them to earn their bread, though many do so from choice, or for what Burns has described as the glorious privilege of being independent. On the other hand there is no country in the world where the avocations of women are so diversified or so

happy result we shall find an ample recompense for what we have done."

Thus has the Board of Lady Managers, in conjunction with state and foreign boards, representing the most advanced and enlightened views of woman's sphere and woman's work, presented a complete exposition of what women have done and are doing in the cause of their sex, in the cause of home, of education, charity, science, art, and in every



CRÈCHE, CHILDREN'S BUILDING



ILLINOIS WOMAN'S HOSPITAL AND PHARMACY

largely represented in commercial and professional circles. According to recent data there are nearly 3,000,000 women and girls who are self-supporting, many of them contributing to the support of others, and with at least an equal number who provide in part for their own maintenance.

Of these more than 14,000 are at the head of business firms or conduct a business of their own, and 26,000 are employed as clerks and book-keepers. Of school-teachers there are 155,000; of teachers of music and professional musicians, 13,000; of physicians and surgeons 2,400, and of chemists and pharmacists nearly 2,000. Of















Section

Three



Author's Edition